aiwa

aiwa SERVICE

CA-DW635

SERVICE MANUAL

COMPACT DISK CARRY
COMPONENT SYSTEM

- BASIC TAPE MECHANISM : TN21-1791
- BASIC CD MECHANISM : 3ZG-2 E1
- TYPE: UST

S/M Code No. 09–992–315–1T1

ELECTRICAL MAIN PARTS LIST - 1

NOTE: The characters in the suffix column indicate the part usage.

USTC	XX.....	A.....
REF.NO PARTS NO.	NO. DESCRIPTION	SUFFIX
C 541	87-010-263-080	0E CAP, ELECT 100-10V	A.....
C 542	87-010-374-080	0E CAP, ELECT 47-10V	A.....
C 548	87-010-401-080	0E CAP, ELECT 1-50V	A.....
C 547	87-010-401-080	0E CAP, ELECT 1-50V	A.....
C 544	87-010-401-080	0E CAP, ELECT 1-50V	A.....
C 543	87-010-405-080	0E CAP, ELECT 10-50V	A.....
IC 501	87-A21-103-040	1E C-IC,MM1454XFBE	A.....
C 202	87-010-405-080	0E CAP, ELECT 10-50V	A.....
C 201	87-010-405-080	0E CAP, ELECT 10-50V	A.....
C 217	87-010-382-080	0E CAP, ELECT 22-25V	A.....
C 215	87-010-401-080	0E CAP, ELECT 1-50V	A.....
C 214	87-010-401-080	0E CAP, ELECT 1-50V	A.....
C 216	87-010-401-080	0E CAP, ELECT 1-50V	A.....
C 213	87-010-401-080	0E CAP, ELECT 1-50V	A.....
C 229	87-010-221-080	0E CAP, ELECT 470-10V	A.....
C 226	87-010-263-080	0E CAP, ELECT 100-10V	A.....
C 222	87-018-131-080	0E CAP, CER 1000P-50V	A.....
C 225	87-018-205-080	0E CAP, CERA-SOL 0.022	A.....
C 260	87-010-405-080	0E CAP, ELECT 10-50V	A.....
CN 201	87-099-719-010	1B CONN,30P TYK-B(X)	A.....
CN 203	87-A60-623-010	CONN,6P V 2MM JMT	A.....
D 201	87-017-091-080	0E ZENER,HZS5C1	A.....
D 252	87-020-465-080	0E DIODE,1SS133 (110MA)	A.....
D 261	87-020-465-080	0E DIODE,1SS133 (110MA)	A.....
D 262	87-020-465-080	0E DIODE,1SS133 (110MA)	A.....
IC 201	87-A21-116-040	1D C-IC,BH3862FS	A.....
J 202	87-099-715-010	1A JACK,PIN 2P	A.....
Q 223	87-026-463-080	0E TR,2SA933S (0.3W)	A.....
Q 221	89-414-683-080	0E TR,2SD1468S 150MHZ 0.4	A.....
Q 222	89-414-683-080	0E TR,2SD1468S 150MHZ 0.4	A.....
C 609	87-010-260-080	0E CAP, ELECT 47-25V	A.....
C 601	87-010-401-080	0E CAP, ELECT 1-50V	A.....
C 602	87-010-401-080	0E CAP, ELECT 1-50V	A.....
C 608	87-010-406-080	0E CAP, ELECT 22-50	A.....
C 607	87-010-406-080	0E CAP, ELECT 22-50	A.....
C 606	87-018-132-080	0E CAP, CER 2200P-16V	A.....
C 605	87-018-132-080	0E CAP, CER 2200P-16V	A.....
C 604	87-018-208-080	0E CAP 0.047-50F	A.....
C 603	87-018-208-080	0E CAP 0.047-50F	A.....
C 613	87-010-263-080	0E CAP, ELECT 100-10V	A.....
C 614	87-010-263-080	0E CAP, ELECT 100-10V	A.....
C 616	87-010-376-090	1A CAP 10-2200	A.....
C 615	87-010-376-090	1A CAP 10-2200	A.....
C 610	87-018-208-080	0E CAP 0.047-50F	A.....
C 625	87-010-405-080	0E CAP, ELECT 10-50V	A.....
C 624	87-010-546-080	0E CAP, ELECT 0.33-50V	A.....
C 623	87-010-546-080	0E CAP, ELECT 0.33-50V	A.....
C 641	87-010-248-080	0E CAP, ELECT 220-10V	A.....
C 644	87-010-260-080	0E CAP, ELECT 47-25V	A.....
C 643	87-010-387-080	1A CAP,E 470-25 SME	A.....
D 631	87-020-465-080	0E DIODE,1SS133 (110MA)	A.....
D 642	87-020-465-080	0E DIODE,1SS133 (110MA)	A.....
D 641	87-020-465-080	0E DIODE,1SS133 (110MA)	A.....
IC 601	87-002-848-010	1C IC,TA8229K	A.....
IC 651	87-001-132-010	0E FUSE, ICP-N38	A.....
J 602	87-A60-238-010	1A TERMINAL,SP 4P (MSC)	A.....
J 601	87-A60-420-010	1A JACK,3.5 ST (MSC)	A.....
L 601	87-A50-087-080	0E COIL,100UH (CECS)	A.....
L 602	87-A50-087-080	0E COIL,100UH (CECS)	A.....
Q 601	89-406-555-080	0E TR,2SD655 (0.5W)	A.....
Q 602	89-406-555-080	0E TR,2SD655 (0.5W)	A.....
Q 642	87-026-462-080	0E TR,2SC1740 S(RS 0.3W)	A.....
Q 641	87-026-463-080	0E TR,2SA933S (0.3W)	A.....
C 702	87-018-205-080	0E CAP, CERA-SOL 0.022	A.....
C 703	87-018-205-080	0E CAP, CERA-SOL 0.022	A.....
C 701	87-018-205-080	0E CAP, CERA-SOL 0.022	A.....
C 704	87-018-205-080	0E CAP, CERA-SOL 0.022	A.....
C 728	87-010-221-080	0E CAP, ELECT 470-10V	A.....
C 723	87-010-248-080	0E CAP, ELECT 220-10V	A.....
C 729	87-010-263-080	0E CAP, ELECT 100-10V	A.....
C 722	87-010-385-080	0E CAP, ELECT 220-25V	A.....
C 727	87-010-401-080	0E CAP, ELECT 1-50V	A.....
C 726	87-010-404-080	0E CAP, ELECT 4.7-50V	A.....
C 720	87-010-405-080	0E CAP, ELECT 10-50V	A.....
C 724	87-018-205-080	0E CAP, CERA-SOL 0.022	A.....
C 730	87-010-248-080	0E CAP, ELECT 220-10V	A.....
C 741	87-010-263-080	0E CAP, ELECT 100-10V	A.....
C 750	87-010-404-080	0E CAP, ELECT 4.7-50V	A.....
C 754	87-010-404-080	0E CAP, ELECT 4.7-50V	A.....
C 751	87-010-404-080	0E CAP, ELECT 4.7-50V	A.....
C 753	87-010-404-080	0E CAP, ELECT 4.7-50V	A.....
C 761	87-010-928-090	1B CAP,E 4700-25 SMG	A.....
C 1831	87-018-209-080	0E CAP, CER 0.1-50V	A.....
CN 701	87-A60-621-010	0E CONN,4P V 2MM JMT	A.....
CN 751	87-A60-626-010	0E CONN,9P V 2MM JMT	A.....
D 704	87-A40-156-080	0E DIODE,1N5392	A.....
D 703	87-A40-156-080	0E DIODE,1N5392	A.....
D 705	87-A40-156-080	0E DIODE,1N5392	A.....

ELECTRICAL MAIN PARTS LIST - 2

D	701	87-A40-156-080	0E	DIODE,1N5392	A
D	702	87-A40-156-080	0E	DIODE,1N5392	A
D	727	87-017-148-080	0E	ZENER,HZS6A1L	A
D	724	87-017-164-080	0E	ZENER,HZS9A2L	A
D	725	87-020-465-080	0E	DIODE,1SS133 (110MA)	A
D	726	87-020-465-080	0E	DIODE,1SS133 (110MA)	A
D	729	87-020-465-080	0E	DIODE,1SS133 (110MA)	A
D	728	87-020-465-080	0E	DIODE,1SS133 (110MA)	A
D	723	87-020-465-080	0E	DIODE,1SS133 (110MA)	A
D	741	87-017-139-080	0E	ZENER,HZS15-2	A
D	748	87-020-465-080	0E	DIODE,1SS133 (110MA)	A
D	750	87-020-465-080	0E	DIODE,1SS133 (110MA)	A
D	753	87-020-465-080	0E	DIODE,1SS133 (110MA)	A
D	751	87-020-465-080	0E	DIODE,1SS133 (110MA)	A
D	766	87-020-465-080	0E	DIODE,1SS133 (110MA)	A
D	769	87-020-465-080	0E	DIODE,1SS133 (110MA)	A
D	767	87-020-465-080	0E	DIODE,1SS133 (110MA)	A
D	768	87-020-465-080	0E	DIODE,1SS133 (110MA)	A
D	763	87-020-465-080	0E	DIODE,1SS133 (110MA)	A
D	761	87-020-465-080	0E	DIODE,1SS133 (110MA)	A
D	765	87-020-465-080	0E	DIODE,1SS133 (110MA)	A
D	760	87-020-465-080	0E	DIODE,1SS133 (110MA)	A
D	764	87-020-465-080	0E	DIODE,1SS133 (110MA)	A
D	762	87-020-465-080	0E	DIODE,1SS133 (110MA)	A
D	771	87-020-465-080	0E	DIODE,1SS133 (110MA)	A
D	770	87-020-465-080	0E	DIODE,1SS133 (110MA)	A
FC	1	87-A90-505-080	0E	FUSE CLAMP,TP00351-51	A
FC	2	87-A90-505-080	0E	FUSE CLAMP,TP00351-51	A
IC	721	87-070-416-010	1B	IC,NJU7201 L55	A
Q	723	87-026-291-080	1A	TR,DTC124XS	A
Q	725	87-026-462-080	0E	TR,2SC1740 S(RS 0.3W)	A
Q	727	87-026-462-080	0E	TR,2SC1740 S(RS 0.3W)	A
Q	722	87-026-463-080	0E	TR,2SA933S (0.3W)	A
Q	721	87-A30-219-080	0E	TR,2SB1443(Q)	A
Q	726	89-113-187-880	0E	TRNSISTOR,2SA1318 (0.5W)	A
Q	724	89-213-702-010	1A	TR,2SB1370 (1.8W)	A
Q	741	87-026-462-080	0E	TR,2SC1740 S(RS 0.3W)	A
Q	750	87-026-219-080	0E	TR,DTA144ES (0.3W)	A
Q	754	87-026-291-080	1A	TR,DTC124XS	A
Q	752	87-026-462-080	0E	TR,2SC1740 S(RS 0.3W)	A
Q	753	87-026-463-080	0E	TR,2SA933S (0.3W)	A
Q	751	89-109-521-080	0E	TR,2SA952 (0.6W)	A
SFR	751	87-024-350-080	0E	SFR 2.2K DIA 6H	A
C	305	87-010-263-080	0E	CAP, ELECT 100-10V	A
C	306	87-010-263-080	0E	CAP, ELECT 100-10V	A
C	304	87-018-130-080	0E	CAP,TC-U 820P-50 B	A
C	303	87-018-130-080	0E	CAP,TC-U 820P-50 B	A
C	309	87-018-130-080	0E	CAP,TC-U 820P-50 B	A
C	302	87-018-131-080	0E	CAP, CER 1000P-50V	A
C	301	87-018-131-080	0E	CAP, CER 1000P-50V	A
C	311	87-010-546-080	0E	CAP, ELECT 0.33-50V	A
C	312	87-010-546-080	0E	CAP, ELECT 0.33-50V	A
C	310	87-018-130-080	0E	CAP,TC-U 820P-50 B	A
C	321	87-018-131-080	0E	CAP, CER 1000P-50V	A
C	334	87-018-122-080	0E	CAP 180P-50 B	A
C	331	87-018-126-080	0E	CAP,TC-U 390P-50 B	A
C	332	87-018-126-080	0E	CAP,TC-U 390P-50 B	A
C	337	87-018-131-080	0E	CAP, CER 1000P-50V	A
C	333	87-018-196-080	0E	CAP, CER 1500P-16V	A
C	340	87-010-408-080	0E	CAP, ELECT 47-50V	A
C	343	87-018-123-080	0E	CAP, CER 220P-50V	A
C	344	87-018-123-080	0E	CAP, CER 220P-50V	A
C	341	87-018-205-080	0E	CAP, CERA-SOL 0.022	A
C	356	87-018-132-080	0E	CAP, CER 2200P-16V	A
C	355	87-018-132-080	0E	CAP, CER 2200P-16V	A
C	369	87-018-118-080	0E	CAP,TC-U 82P-50 B	A
C	374	87-010-401-080	0E	CAP, ELECT 1-50V	A
C	373	87-010-401-080	0E	CAP, ELECT 1-50V	A
C	370	87-018-118-080	0E	CAP,TC-U 82P-50 B	A
C	384	87-010-374-080	0E	CAP, ELECT 47-10V	A
C	382	87-010-401-080	0E	CAP, ELECT 1-50V	A
C	383	87-010-401-080	0E	CAP, ELECT 1-50V	A
C	385	87-010-405-080	0E	CAP, ELECT 10-50V	A
CN	302	87-A60-621-010	0E	CONN,4P V 2MM JMT	A
CN	301	87-A60-622-010	0E	CONN,5P V 2MM JMT	A
IC	301	87-017-889-010	1A	IC,NJM4558LD	A
IC	302	87-017-889-010	1A	IC,NJM4558LD	A
L	331	87-007-322-010	0E	COIL OSC BIAS 61 KHZ	A
Q	301	87-A30-090-080	0E	FET,2SK2541	A
Q	302	87-A30-090-080	0E	FET,2SK2541	A
Q	303	87-A30-091-080	1E	FET,2SJ460	A
Q	304	87-A30-091-080	1E	FET,2SJ460	A
Q	312	87-A30-197-080	0E	TR,KTA1267GR	A
Q	311	87-A30-197-080	0E	TR,KTA1267GR	A
Q	320	89-320-011-080	0E	TR,2SC2001 (15W)	A
Q	333	87-026-214-080	0E	TR,DTA114YS (0.3W)	A
Q	331	87-026-462-080	0E	TR,2SC1740 S(RS 0.3W)	A
Q	344	87-026-218-080	0E	TR,DTC144ES (0.2W)	A
Q	341	87-A30-197-080	0E	TR,KTA1267GR	A
Q	343	87-A30-197-080	0E	TR,KTA1267GR	A
Q	342	87-A30-197-080	0E	TR,KTA1267GR	A
Q	351	87-A30-197-080	0E	TR,KTA1267GR	A
Q	352	87-A30-197-080	0E	TR,KTA1267GR	A

ELECTRICAL MAIN PARTS LIST - 3

*	0001	8Z-CT4-624-010		HLDR,BAR-ANT.	A
C	5	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	A
C	6	87-010-311-080	0E	CAP 12P	A
C	3	87-010-314-080	0E	C-CAP,S 22P-50V	A
C	1	87-010-314-080	0E	C-CAP,S 22P-50V	A
C	2	87-010-316-080	0E	C-CAP,S 33P-50 CH	A
C	7	87-012-158-080	0E	C-CAP,S 390P-50 CH	A
C	8	87-012-349-080	0E	C-CAP,S 1000P-50 CH	A
C	19	87-010-112-080	0E	CAP, ELECT 100-16V	A
C	13	87-010-145-080	0E	C-CAP,S 1P-50 CH	A
C	17	87-010-194-080	0E	CAP, CHIP 0.047	A
C	10	87-010-197-080	0E	CAP, CHIP 0.01 DM	A
C	11	87-010-197-080	0E	CAP, CHIP 0.01 DM	A
C	12	87-010-197-080	0E	CAP, CHIP 0.01 DM	A
C	14	87-010-305-080	0E	C-CAP 470P-50CH	A
C	16	87-010-380-080	0E	CAP, ELECT 47-16V	A
C	15	87-012-349-080	0E	C-CAP,S 1000P-50 CH	A
C	18	87-015-819-080	0E	CAPACITOR,0.01	A
C	26	87-010-197-080	0E	CAP, CHIP 0.01 DM	A
C	21	87-010-197-080	0E	CAP, CHIP 0.01 DM	A
C	22	87-010-197-080	0E	CAP, CHIP 0.01 DM	A
C	23	87-010-197-080	0E	CAP, CHIP 0.01 DM	A
C	27	87-010-401-080	0E	CAP, ELECT 1-50V	A
C	20	87-010-404-080	0E	CAP, ELECT 4.7-50V	A
C	29	87-010-544-080	0E	CAP, ELECT 0.1-50V	A
C	28	87-010-544-080	0E	CAP, ELECT 0.1-50V	A
C	25	87-010-545-080	0E	CAP, ELECT 0.22-50V	A
C	24	87-015-629-080	0E	CHIP CAPACITOR, 0.0022	A
C	36	87-010-112-080	0E	CAP, ELECT 100-16V	A
C	37	87-010-197-080	0E	CAP, CHIP 0.01 DM	A
C	30	87-010-198-080	0E	CAP, CHIP 0.022	A
C	31	87-010-198-080	0E	CAP, CHIP 0.022	A
C	38	87-010-380-080	0E	CAP, ELECT 47-16V	A
C	33	87-010-401-080	0E	CAP, ELECT 1-50V	A
C	34	87-010-401-080	0E	CAP, ELECT 1-50V	A
C	39	87-010-404-080	0E	CAP, ELECT 4.7-50V	A
C	35	87-015-819-080	0E	CAPACITOR,0.01	A
C	40	87-010-197-080	0E	CAP, CHIP 0.01 DM	A
C	46	87-010-197-080	0E	CAP, CHIP 0.01 DM	A
C	48	87-010-197-080	0E	CAP, CHIP 0.01 DM	A
C	47	87-010-197-080	0E	CAP, CHIP 0.01 DM	A
C	44	87-010-311-080	0E	CAP 12P	A
C	45	87-010-312-080	0E	C-CAP,S 15P-50 CH	A
C	43	87-012-349-080	0E	C-CAP,S 1000P-50 CH	A
C	41	87-012-349-080	0E	C-CAP,S 1000P-50 CH	A
C	42	87-012-349-080	0E	C-CAP,S 1000P-50 CH	A
C	50	87-010-197-080	0E	CAP, CHIP 0.01 DM	A
CF	3	82-785-747-080	1A	CF,MS2 GHY,R	A
CF	2	82-785-747-080	1A	CF,MS2 GHY,R	A
CF	1	87-A91-094-010		FLTR,CDA10.7 MG	A
D	6	87-017-072-080	0E	ZENER,HZS3B1	A
D	2	87-020-465-080	0E	DIODE,1SS133 (110MA)	A
D	1	87-020-465-080	0E	DIODE,1SS133 (110MA)	A
D	822	87-020-465-080	0E	DIODE,1SS133 (110MA)	A
D	821	87-020-465-080	0E	DIODE,1SS133 (110MA)	A
IC	1	87-A21-184-010	1D	IC,TA2104AN	A
IC	2	87-A21-185-040	1C	C-IC,LC72121M	A
L	9	87-005-849-080	0E	COIL,10UH(CECS)	A
L	8	87-005-849-080	0E	COIL,10UH(CECS)	A
L	2	87-006-244-010	0E	COIL,RF FM 3-1/2T,L4	A
L	4	87-A50-420-010		COIL,MW OSC(SYN)	A
L	7	87-A90-733-010	1A	FLTR,PCFAZH-450 (TOK)	A
L	3	8Z-CT4-616-010		BAR-ANT,MW2B	A
L	5	8Z-CT4-619-010		COIL,FM RF EX	A
L	6	8Z-CT4-620-010		COIL,FM OSC EX	A
Q	1	89-319-233-080	0E	TR,2SC1923 (0.1W)	A
Q	818	87-026-291-080	1A	TR,DTC124XS	A
Q	820	87-026-463-080	0E	TR,2SA933S (0.3W)	A
SCR	4	87-A40-615-040		VARI-CAP,KV1311NT	A
SCR	5	87-A40-615-040		VARI-CAP,KV1311NT	A
SCR	3	87-A40-616-080	1B	VARI-CAP,SVC384(S/T)	A
TC	1	87-011-220-080	1A	TRIMMER CAP 20P VTC	A
X	1	87-A70-061-010	1A	VIB,XTAL 4.500MHZ CSA-309	A
C	7	87-010-400-080	0E	CAP, ELECT 0.47-50V	A
C	8	87-010-401-080	0E	CAP, ELECT 1-50V	A
C	3	87-018-209-080	0E	CAP, CER 0.1-50V	A
C	2	87-018-209-080	0E	CAP, CER 0.1-50V	A
C	18	87-010-248-080	0E	CAP, ELECT 220-10V	A
C	12	87-010-263-080	0E	CAP, ELECT 100-10V	A
C	10	87-010-405-080	0E	CAP, ELECT 10-50V	A
C	16	87-018-116-080	0E	CAP, CER 56P-50V	A
C	17	87-018-117-080	0E	CAP,TC-U 68P-50 SL	A
C	15	87-018-118-080	0E	CAP,TC-U 82P-50 B	A
C	13	87-018-131-080	0E	CAP, CER 1000P-50V	A
C	23	87-018-209-080	0E	CAP, CER 0.1-50V	A
C	21	87-018-209-080	0E	CAP, CER 0.1-50V	A
C	22	87-018-209-080	0E	CAP, CER 0.1-50V	A
C	73	87-018-131-080	0E	CAP, CER 1000P-50V	A
C	98	87-010-263-080	0E	CAP, ELECT 100-10V	A
C	101	87-010-545-080	0E	CAP, ELECT 0.22-50V	A
C	102	87-018-209-080	0E	CAP, CER 0.1-50V	A
C	181	87-010-248-080	0E	CAP, ELECT 220-10V	A
C	200	87-018-106-080	0E	CAP,TC-U 15P-50 SL	A

ELECTRICAL MAIN PARTS LIST - 4

C	201	87-018-109-080	0E	CAP, CER 22P-50V	A
CN	1	87-099-720-010	1B	CONN,30P TYK-B(P)	A
CN	2	88-CT4-610-010	1B	CONN ASSY,10P	A
D	2	87-020-465-080	0E	DIODE,1SS133 (110MA)	A
D	1	87-020-465-080	0E	DIODE,1SS133 (110MA)	A
D	14	87-020-465-080	0E	DIODE,1SS133 (110MA)	A
D	32	87-020-465-080	0E	DIODE,1SS133 (110MA)	A
D	30	87-020-465-080	0E	DIODE,1SS133 (110MA)	A
D	51	87-020-465-080	0E	DIODE,1SS133 (110MA)	A
D	50	87-020-465-080	0E	DIODE,1SS133 (110MA)	A
D	61	87-020-465-080	0E	DIODE,1SS133 (110MA)	A
D	62	87-020-465-080	0E	DIODE,1SS133 (110MA)	A
D	101	87-020-465-080	0E	DIODE,1SS133 (110MA)	A
D	102	87-020-465-080	0E	DIODE,1SS133 (110MA)	A
IC	1	8Z-CT4-606-010	2A	C-IC,LC867232A-***	A
L	1	87-003-171-010	0E	COIL,15UH TROIDAL	A
L	11	87-003-171-010	0E	COIL,15UH TROIDAL	A
L	10	87-003-171-010	0E	COIL,15UH TROIDAL	A
Q	6	87-026-287-080	0E	TR,DTC143ES	A
Q	1	87-026-291-080	1A	TR,DTC124XS	A
Q	4	87-026-291-080	1A	TR,DTC124XS	A
Q	3	87-026-291-080	1A	TR,DTC124XS	A
Q	2	87-026-462-080	0E	TR,2SC1740 S(RS 0.3W)	A
Q	7	87-026-462-080	0E	TR,2SC1740 S(RS 0.3W)	A
Q	5	87-026-462-080	0E	TR,2SC1740 S(RS 0.3W)	A
Q	8	87-026-462-080	0E	TR,2SC1740 S(RS 0.3W)	A
Q	9	87-026-462-080	0E	TR,2SC1740 S(RS 0.3W)	A
Q	10	87-026-462-080	0E	TR,2SC1740 S(RS 0.3W)	A
Q	11	87-026-462-080	0E	TR,2SC1740 S(RS 0.3W)	A
Q	12	87-026-462-080	0E	TR,2SC1740 S(RS 0.3W)	A
Q	13	87-026-462-080	0E	TR,2SC1740 S(RS 0.3W)	A
Q	101	87-026-462-080	0E	TR,2SC1740 S(RS 0.3W)	A
Q	102	87-026-463-080	0E	TR,2SA933S (0.3W)	A
X	1	87-030-273-010	1A	VIB,XTAL 32.768K5PPM	A
X	2	87-A70-070-080	1A	VIB,CER 5.76MHZ CRHF	A
D	9	87-001-519-010	0E	LIGHT EMITTING DIODE,SLR-37	A
D	4	87-001-519-010	0E	LIGHT EMITTING DIODE,SLR-37	A
D	6	87-A40-410-010	0E	LED,SEL2515C PGRN	A
D	8	87-A40-410-010	0E	LED,SEL2515C PGRN	A
D	7	87-A40-410-010	0E	LED,SEL2515C PGRN	A
D	5	87-A40-410-010	0E	LED,SEL2515C PGRN	A
D	10	87-001-519-010	0E	LIGHT EMITTING DIODE,SLR-37	A
D	11	87-001-519-010	0E	LIGHT EMITTING DIODE,SLR-37	A
D	27	87-A40-161-010	0E	LED,L-1154SGD	A
D	21	87-A40-161-010	0E	LED,L-1154SGD	A
D	29	87-A40-161-010	0E	LED,L-1154SGD	A
D	25	87-A40-161-010	0E	LED,L-1154SGD	A
D	31	87-A40-161-010	0E	LED,L-1154SGD	A
D	33	87-A40-161-010	0E	LED,L-1154SGD	A
D	35	87-A40-161-010	0E	LED,L-1154SGD	A
IC	3	87-A20-914-010	1B	IC,SPS-442-1-F	A
LCD	1	8Z-CT4-607-010	2A	LCD,AIW4176	A
S	41	87-A90-770-080		SW,TACT TRT134-L4.3	A
S	49	87-A90-770-080		SW,TACT TRT134-L4.3	A
S	46	87-A90-770-080		SW,TACT TRT134-L4.3	A
S	40	87-A90-770-080		SW,TACT TRT134-L4.3	A
S	44	87-A90-770-080		SW,TACT TRT134-L4.3	A
S	48	87-A90-770-080		SW,TACT TRT134-L4.3	A
S	47	87-A90-770-080		SW,TACT TRT134-L4.3	A
S	43	87-A90-770-080		SW,TACT TRT134-L4.3	A
S	45	87-A90-770-080		SW,TACT TRT134-L4.3	A
S	59	87-A90-770-080		SW,TACT TRT134-L4.3	A
S	58	87-A90-770-080		SW,TACT TRT134-L4.3	A
S	56	87-A90-770-080		SW,TACT TRT134-L4.3	A
S	50	87-A90-770-080		SW,TACT TRT134-L4.3	A
S	54	87-A90-770-080		SW,TACT TRT134-L4.3	A
S	53	87-A90-770-080		SW,TACT TRT134-L4.3	A
S	52	87-A90-770-080		SW,TACT TRT134-L4.3	A
S	51	87-A90-770-080		SW,TACT TRT134-L4.3	A
S	55	87-A90-770-080		SW,TACT TRT134-L4.3	A
S	57	87-A90-770-080		SW,TACT TRT134-L4.3	A
S	61	87-A90-770-080		SW,TACT TRT134-L4.3	A
S	60	87-A90-770-080		SW,TACT TRT134-L4.3	A
C	409	87-010-248-080	0E	CAP, ELECT 220-10V	A
C	408	87-010-260-080	0E	CAP, ELECT 47-25V	A
C	407	87-010-401-080	0E	CAP, ELECT 1-50V	A
C	404	87-010-401-080	0E	CAP, ELECT 1-50V	A
C	405	87-010-545-080	0E	CAP, ELECT 0.22-50V	A
C	403	87-018-121-080	0E	CAP, CER 150P-50V	A
C	406	87-018-131-080	0E	CAP, CER 1000P-50V	A
C	401	87-018-132-080	0E	CAP, CER 2200P-16V	A
C	402	87-018-133-080	0E	CAPACITOR,CER 4700P-16V	A
C	413	87-010-374-080	0E	CAP, ELECT 47-10V	A
C	410	87-010-405-080	0E	CAP, ELECT 10-50V	A
C	414	87-018-120-080	0E	CAP, CERA-SOL SS 120P	A
D	405	87-020-465-080	0E	DIODE,1SS133 (110MA)	A
D	404	87-020-465-080	0E	DIODE,1SS133 (110MA)	A
D	402	87-020-465-080	0E	DIODE,1SS133 (110MA)	A
D	401	87-020-465-080	0E	DIODE,1SS133 (110MA)	A
IC	401	87-070-417-010	1A	IC,NJM4558 DD	A
J	401	87-A60-651-010	0E	JACK,3.5MONO	A
L	401	87-A50-067-080	0E	COIL,1.00UH (CECS)	A
Q	402	87-026-462-080	0E	TR,2SC1740 S(RS 0.3W)	A

Q	401	87-026-462-080	0E	TR,2SC1740 S(RS 0.3W)	A
VR	401	82-NK7-615-010	1B	VR,10KA RK11K1130	A
C	9	87-010-248-080	0E	CAP, ELECT 220-10V	A
C	4	87-010-248-080	0E	CAP, ELECT 220-10V	A
C	3	87-010-263-080	0E	CAP, ELECT 100-10V	A
C	6	87-010-374-080	0E	CAP, ELECT 47-10V	A
C	1	87-010-403-080	0E	CAP, ELECT 3.3-50V	A
C	7	87-018-131-080	0E	CAP, CER 1000P-50V	A
C	2	87-018-134-080	0E	CAPACITOR,TC-U 0.01-16	A
C	5	87-018-134-080	0E	CAPACITOR,TC-U 0.01-16	A
C	10	87-010-263-080	0E	CAP, ELECT 100-10V	A
C	12	87-010-401-080	0E	CAP, ELECT 1-50V	A
C	14	87-010-405-080	0E	CAP, ELECT 10-50V	A
C	16	87-010-545-080	0E	CAP, ELECT 0.22-50V	A
C	17	87-018-125-080	0E	CAP, CER 330P-50V	A
C	25	87-018-129-080	0E	CAP, CER 680P-50V	A
C	29	87-018-133-080	0E	CAPACITOR,CER 4700P-16V	A
C	22	87-018-196-080	0E	CAP, CER 1500P-16V	A
C	36	87-010-374-080	0E	CAP, ELECT 47-10V	A
C	32	87-010-374-080	0E	CAP, ELECT 47-10V	A
C	33	87-010-401-080	0E	CAP, ELECT 1-50V	A
C	37	87-010-404-080	0E	CAP, ELECT 4.7-50V	A
C	31	87-010-545-080	0E	CAP, ELECT 0.22-50V	A
C	30	87-018-123-080	0E	CAP, CER 220P-50V	A
C	39	87-018-131-080	0E	CAP, CER 1000P-50V	A
C	35	87-018-134-080	0E	CAPACITOR,TC-U 0.01-16	A
C	34	87-018-199-080	0E	CAP, CER 3300P	A
C	38	87-018-209-080	0E	CAP, CER 0.1-50V	A
C	48	87-018-111-080	0E	CAP, CERA-SOL SS 27P	A
C	40	87-018-141-080	0E	CAP, CERA-SOL SS 3.3P CH	A
C	42	87-018-150-080	0E	CAP,TC-U 18P-50 CH	A
C	47	87-018-209-080	0E	CAP, CER 0.1-50V	A
C	45	87-018-209-080	0E	CAP, CER 0.1-50V	A
C	46	87-018-209-080	0E	CAP, CER 0.1-50V	A
C	59	87-010-263-080	0E	CAP, ELECT 100-10V	A
C	50	87-018-127-080	0E	CAP, CER 470P-50V	A
C	57	87-A10-142-010		CAP,CER 33P-50 K CH	A
C	58	87-A10-142-010		CAP,CER 33P-50 K CH	A
C	67	87-010-263-080	0E	CAP, ELECT 100-10V	A
C	62	87-010-370-080	0E	CAP,E 330-6.3 SME	A
C	65	87-010-404-080	0E	CAP, ELECT 4.7-50V	A
C	69	87-018-121-080	0E	CAP, CER 150P-50V	A
C	60	87-018-209-080	0E	CAP, CER 0.1-50V	A
C	61	87-018-209-080	0E	CAP, CER 0.1-50V	A
C	66	87-018-209-080	0E	CAP, CER 0.1-50V	A
C	72	87-010-221-080	0E	CAP, ELECT 470-10V	A
C	78	87-010-221-080	0E	CAP, ELECT 470-10V	A
C	70	87-010-263-080	0E	CAP, ELECT 100-10V	A
C	79	87-018-134-080	0E	CAPACITOR,TC-U 0.01-16	A
C	71	87-018-134-080	0E	CAPACITOR,TC-U 0.01-16	A
C	73	87-018-134-080	0E	CAPACITOR,TC-U 0.01-16	A
C	81	87-010-405-080	0E	CAP, ELECT 10-50V	A
C	82	87-010-405-080	0E	CAP, ELECT 10-50V	A
C	84	87-018-125-080	0E	CAP, CER 330P-50V	A
C	83	87-018-125-080	0E	CAP, CER 330P-50V	A
C	89	87-018-134-080	0E	CAPACITOR,TC-U 0.01-16	A
C	98	87-018-119-080	0E	CAP, CER 100P-50V	A
C	111	87-018-209-080	0E	CAP, CER 0.1-50V	A
C	112	87-018-209-080	0E	CAP, CER 0.1-50V	A
C	130	87-018-127-080	0E	CAP, CER 470P-50V	A
CN	2	87-A60-131-010	0E	CONN,6P V FE	A
CN	1	87-A60-424-010	0E	CONN,16P V TOC-B	A
CN	4	87-A60-627-010	0E	CONN,10P V 2MM JMT	A
CN	5	88-CT4-612-010	1A	CONN ASSY,6PAF	A
D	6	87-020-465-080	0E	DIODE,1SS133 (110MA)	A
D	7	87-020-465-080	0E	DIODE,1SS133 (110MA)	A
D	2	87-020-465-080	0E	DIODE,1SS133 (110MA)	A
D	1	87-020-465-080	0E	DIODE,1SS133 (110MA)	A
IC	1	87-A20-446-010	1E	C-IC,LA9241ML	A
IC	2	87-A20-459-010	2A	C-IC,LC78622ED	A
IC	4	87-A20-856-010	1D	IC,BA6898S	A
L	1	87-005-849-080	0E	COIL,10UH(CECS)	A
L	2	87-005-849-080	0E	COIL,10UH(CECS)	A
L	26	87-005-849-080	0E	COIL,10UH(CECS)	A
Q	1	87-026-463-080	0E	TR,2SA933S (0.3W)	A
Q	51	87-026-464-080	0E	TR,DTC114TS (0.3W)	A
Q	71	89-113-187-880	0E	TRNSISTOR,2SA1318 (0.5W)	A
Q	82	87-026-486-080	0E	TR,DTA144TS	A
Q	81	87-026-486-080	0E	TR,DTA144TS	A
Q	83	87-026-502-080	0E	DTC144TS	A
Q	84	87-026-502-080	0E	DTC144TS	A
X	1	81-592-641-010	1A	CERAMIC FILTER, 16.93MHZ	A
C	92	87-010-221-080	0E	CAP, ELECT 470-10V	A
C	91	87-018-134-080	0E	CAPACITOR,TC-U 0.01-16	A
D	5	87-020-465-080	0E	DIODE,1SS133 (110MA)	A
D	3	87-020-465-080	0E	DIODE,1SS133 (110MA)	A
D	4	87-020-465-080	0E	DIODE,1SS133 (110MA)	A
Q	92	87-026-291-080	1A	TR,DTC124XS	A
Q	91	89-112-964-580	1A	TR,2SA1296Y 0.75W 120M	A
C	102	87-010-112-080	0E	CAP, ELECT 100-16V	A
C	101	87-018-134-080	0E	CAPACITOR,TC-U 0.01-16	A
CN	101	87-A60-130-010	0E	CONN,5P V FE	A
IC	10	87-001-982-010	1B	IC,TA7291S	A

MECHANICAL PARTS LIST - 1

NOTE: The characters in the suffix column indicate the part usage.

REF.NO	PARTS NO.	NO.	DESCRIPTION	SUFFIX
	81-CD1-032-010	0E	BADGE,AIWA 30J	A
	84-CT4-106-110	1A	HLDR,CORD	A
	87-CT4-022-110	1A	LID,BATT	A
	87-CT4-024-110	1B	PANEL,TOP ST	A
	87-CT4-027-110	2A	CABI,REAR SPKR L	A
	87-CT4-028-110	2A	CABI,REAR SPKR R	A
	87-CT4-036-110	0E	CABI,REAR N	A
	87-CT4-037-110	0E	COVER, BATT	A
	88-CT4-026-010	0E	CUSH,FOOT	A
	8Z-CT4-001-010		CABI,FRONT	A
	8Z-CT4-002-010		DOOR,CD	A
	8Z-CT4-003-010		BOX,CASS L	A
	8Z-CT4-004-010		BOX,CASS R	A
	8Z-CT4-012-010		WINDOW,CASS L	A
	8Z-CT4-013-010		WINDOW,CASS R	A
	8Z-CT4-014-010		LENS,FUNC	A
	8Z-CT4-015-010		LENS,EQ	A
	8Z-CT4-016-010		CABI,FRONT SP L	A
	8Z-CT4-017-010		CABI,FRONT SP R	A
	8Z-CT4-018-010		NET,SPKR L	A
	8Z-CT4-019-010		NET,SPKR R	A
	8Z-CT4-025-010		WINDOW,DISP U	A
	88-CT4-023-110	0E	KEY,CONT CASS L	A
	88-CT4-024-310	0E	KEY,CONT CASS R	A
	88-CT4-027-210	0E	KNOB,RTRY TU	A
	8Z-CT4-005-010		KEY,POWER	A
	8Z-CT4-006-010		KEY,EJECT	A
	8Z-CT4-007-010		KEY,FUNCTION	A
	8Z-CT4-008-010		KEY,OPE	A
	8Z-CT4-009-010		KEY,EQ	A
	8Z-CT4-010-010		KEY,VOL	A
	88-CT4-025-010	0E	PLATE,VOLTAGE	A
	88-CT4-207-010	0E	SPR-C,BATT A	A
	88-CT4-208-010	0E	SPR-C,BATT B	A
	88-CT4-218-010	0E	COVER,LED	A
	88-CT4-224-010		HLDR,ANT	A
	88-CT4-225-010	0E	GEAR,OIL DUMP	A
	88-CT4-226-010	0E	HLDR,OIL DUMP	A
	8Z-CT4-203-010		HLDR,LED A	A
	8Z-CT4-204-010		HLDR,LED B	A
	8Z-CT4-205-010		CHAS,CD L	A
	8Z-CT4-206-010		CHAS,CD R	A
	8Z-CT4-207-010		BOSS,FRONT CABI	A
	8Z-CT4-210-010		HLDR,LED C	A
	8Z-CT4-211-010		SPR-T,CASS	A
	87-067-579-010	0E	TAPPING SCREW, BVT2+3-8	A
	87-493-100-410	0E	VWWS+3-16 BLK	A
	87-661-097-410	0E	TAPPING SCREW, VFT1+3-12	A
	87-661-100-410	0E	VFT1+3-16	A
	87-751-096-410	0E	VT2+3-10 GLD	A
	87-751-098-410	0E	SCREW 3X14	A
	87-753-097-410	0E	VT2+3-12 W/O BLK	A
	87-753-104-410	0E	VT2+3-30 W/0 BLK	A
	86-CT4-616-010	1C	ANT,ROD	A
	86-CT4-625-010	1F	SPKR,W 120 40HM 10W 6CT-4	A
	86-CT4-626-010	0E	SPKR,T	A
	86-CT4-627-010	1A	CORD,2PSPKR	A
	87-035-488-010	0E	FUSE,3.15A 125V D UL	A
	87-A60-177-010	1A	JACK,AC U W/SW	A

MECHANICAL PARTS LIST - 2

87-A90-086-010	0E	COVER,AC-SOCKET	A.....
87-A90-193-010	0E	HLDR,CV100 (B)	A.....
88-905-201-210	0E	FF-CABLE, 5P 1.25	A.....
88-906-121-110	0E	FF-CABLE,6P	A.....
88-CT4-607-010	1A	CONN ASSY,5P	A.....
88-CT4-608-110	1A	CONN ASSY,9P	A.....
88-CT4-623-010	0E	FF-CABLE, 16P 1.0 120MM	A.....
8Z-CT4-612-010	2A	PT,U	A.....

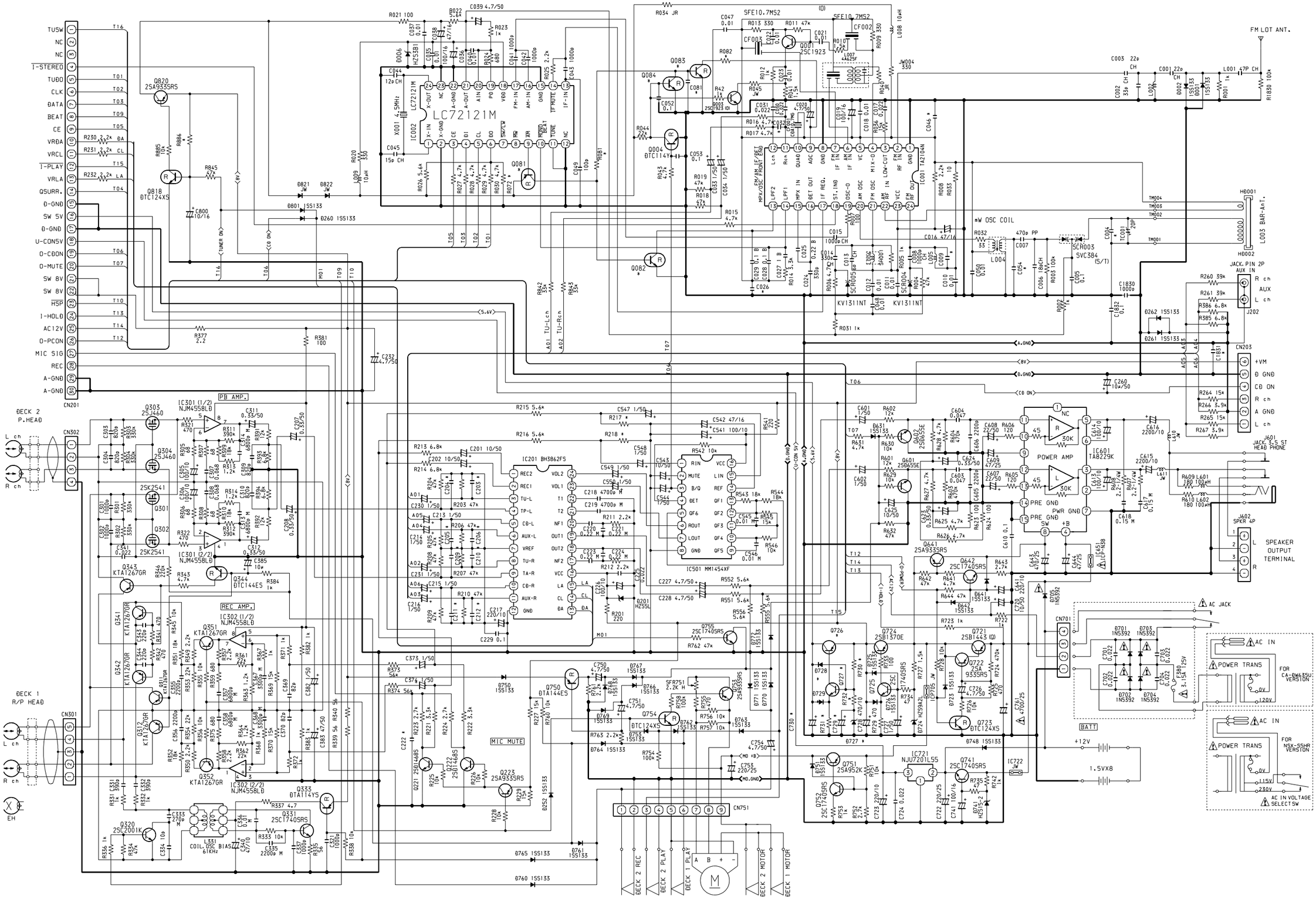
ACCESSORIES LIST

NOTE: The characters in the suffix column indicate the part usage.

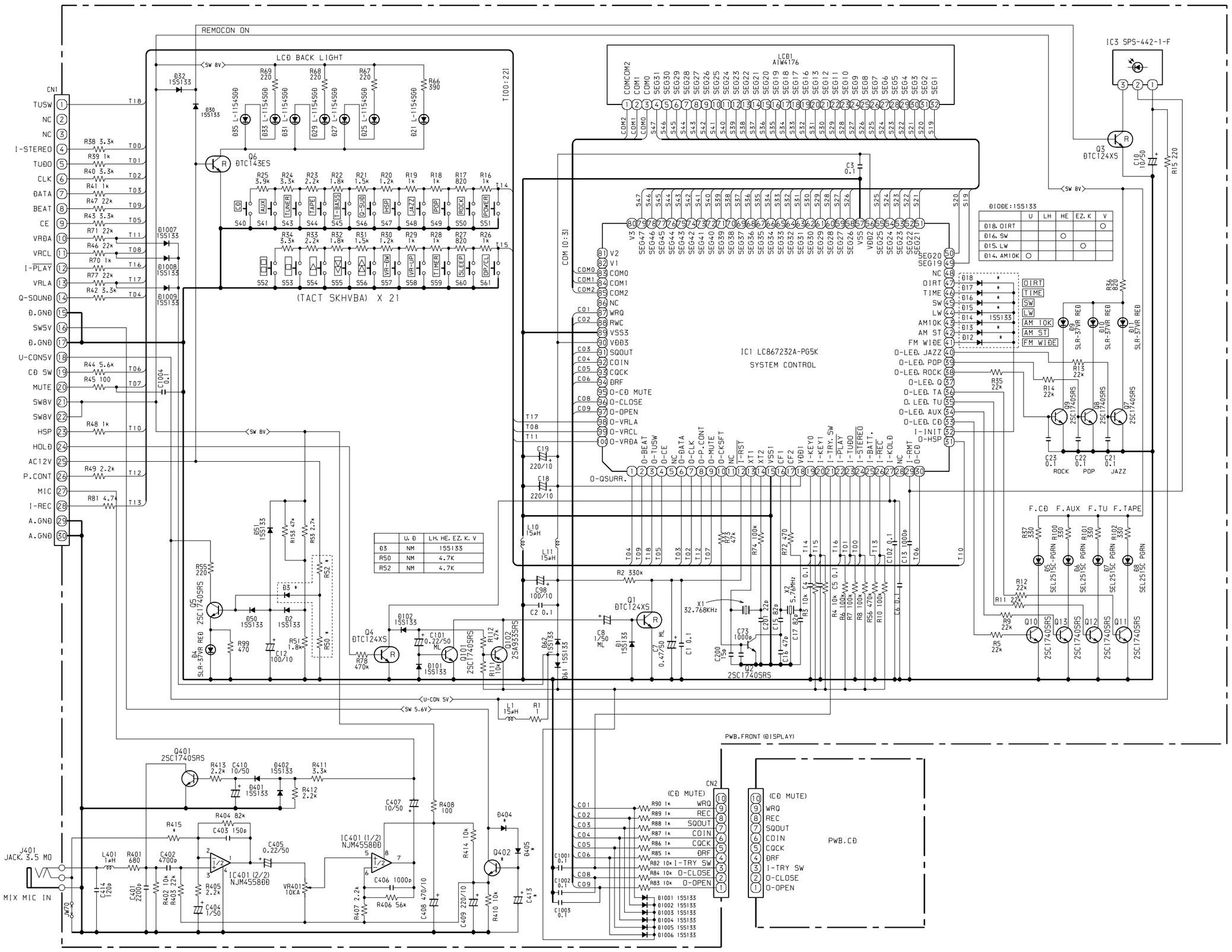
USTC .....XX.....A.....

REF.NO	PARTS NO.	NO.	DESCRIPTION	SUFFIX
	8Z-CT4-905-010		IB,U(ESF)S	A.....
	87-A80-109-010	1C	AC CORD,HK7281 BLK U	A.....
	8Z-CK4-952-010	1F	RC UNIT,RC-*****	A.....

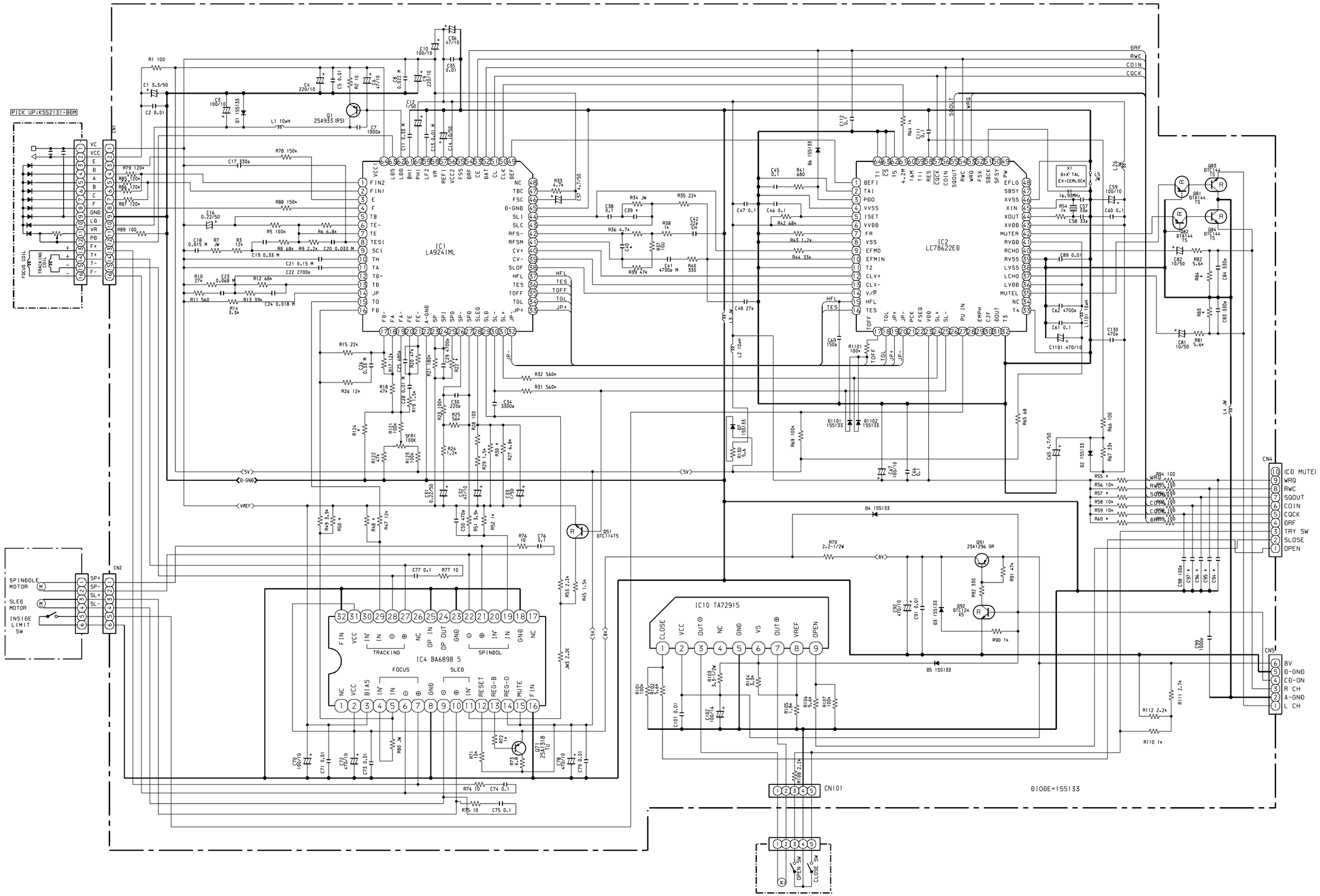
SCHEMATIC DIAGRAM – 1



SCHEMATIC DIAGRAM – 2



SCHEMATIC DIAGRAM – 3



サービス技術ニュース	
番号	連絡内容
G一　　一	
G一　　一	
G一　　一	

アイワ株式会社
AIWA CO.,LTD.

931196
Tokyo Japan

〒110-8710 東京都台東区池之端1-2-11 ☎03（3827）3111（代表）

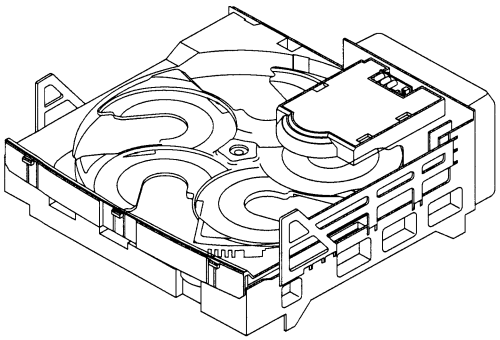
Printed in Singapore

aiwa

aiwa SERVICE

6ZG-1S
6ZG-1S2
6ZG-1S3

SERVICE MANUAL



CD MECHANISM

• BASIC CD MECHANISM: 3ZG-2 E2

• TYPE: English

BASIC NAME	DERIVATION NAME					
6ZG-1S	D	SH				
6ZG-1S2	D	SH				
6ZG-1S3	D	SH				

■ This mechanism has various derivation. Derivation name is indicated by the Service Manual for eath model.

S/M Code No. 09-984-249-90T

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WIRING 43, 44
SCHEMATIC DIAGRAM 45, 46
TEST MODE 47

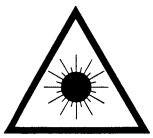
USE MODEL LIST 48

PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

WARNING!

WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION. BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.



- Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
- Advarsel: Usynling laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

VAROITUS!

Laiteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saattaa altistaa käyt-täjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

VARNING!

Om apparaten används på annat sätt än vad som specificeras i denna bruksanvising, kan användaren utsättas för osynling laserstrålning, som överskrider gränsen för laserklass 1.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

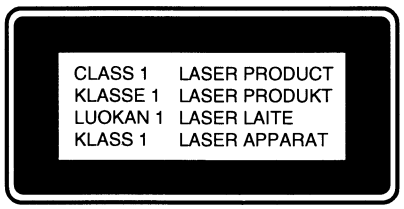
ATTENTION

L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

ADVARSEL!

Usynlig laserstråling ved åbning, når sikkerhedsafbrydereer ude af funktion. Undgå udsættelse for stråling.

This Compact Disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT label is located on the rear exterior.

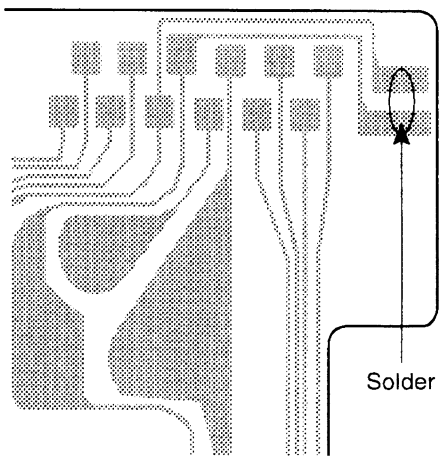


Precaution to replace Optical block (KSS-213F)

Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure ground body and workbench, and use care the clothes do not touch the diode.

1) After the connection, remove solder shown in the right figure.

PICK-UP Assy P.C.B



This is the SERVICE MANUAL for the BASIC CD MECHANISM of BASIC NAME: 6ZG-1. This BASIC NAME includes the following models as shown under the SUFFIX name: DERIVATION NAME. Please use this manual with the separate SERVICE MANUAL for DERIVATION NAME.

BASIC CD MECHANISM: 6ZG-1 DSH

SUFFIX
(DERIVATION NAME)

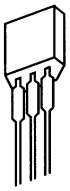
BASIC NAME: 6ZG-1S (SONY IC HIGH END MODEL)
6ZG-1S2 (The 2nd SONY IC MODEL)
6ZG-1S3 (The 3rd SONY IC MODEL)

BASIC NAME	DERIVATION NAME					
6ZG-1S	D	SH	—	—	—	—
6ZG-1S2	D	SH	—	—	—	—
6ZG-1S3	D	SH	—	—	—	—

DERIVATION NAME

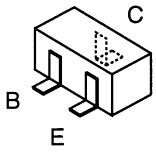
D: Digital output function
SH: Pick up equipped with shutter

TRANSISTOR ILLUSTRATION

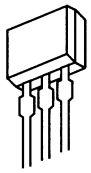


2SA933S
DTC114ES

2SA1015
2SC2001
2SD2172
2SD655



2SA1235
2SC2412
2SC2712
DTA114EK
DTC114EK
DTC114TK
DTC123JK
DTC143TK



2SB1329

DISASSEMBLY INSTRUCTIONS

1. How to replace PICK UP.

1) Open the TRAY.
   Push the stopper to arrow direction and release half of the SHAFT SLED.
2) Turn GEAR MAIN CAM to the counterclockwise (arrow "a") direction, and lift up CD mechanism. (Fig-1)
3) Remove SHAFT SLED.
4) CD mechanism in down position, replace PICK UP.
5) Lift up CD mechanism (Fig-1), and Reassemble the SHAFT SLED.

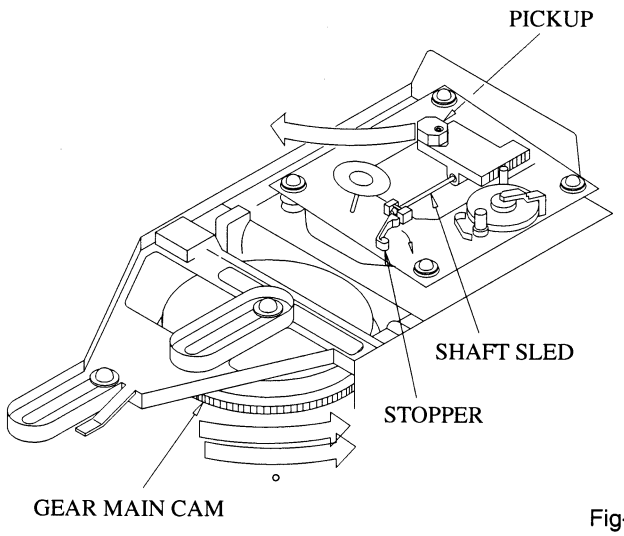
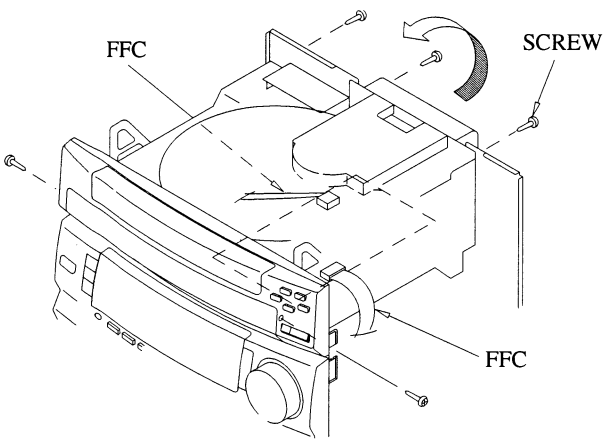


Fig-1

2. How to remove the 5CD CHANGER BLOCK (Fig-2)

1) Remove the two FFC of the CD circuit board, and remove the five SCREWS.
2) Lift 5 CD CHANGER BLOCK from behind, and remove it. (5CD CHANGER BLOCK can be removed even if PANEL TRAY is not removed.)



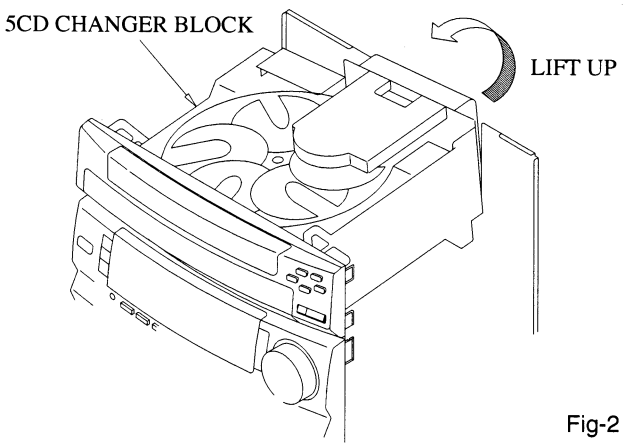


Fig-2

3. The disassemble and reassemble the TRAY

3-1. Disassembling procedure.

1) Push the PLATE GEAR'S Boss at the bottom part of CHAS MECHA strongly to the outside (arrow "b" direction). (Fig-3)
   (Confirm that TRAY appears a little in the front.)
2) Draw TRAY to the open position.
3) Remove FFC, and push the two LEVERS at both side of the CHAS MECH to remove TRAY. (Fig-4)

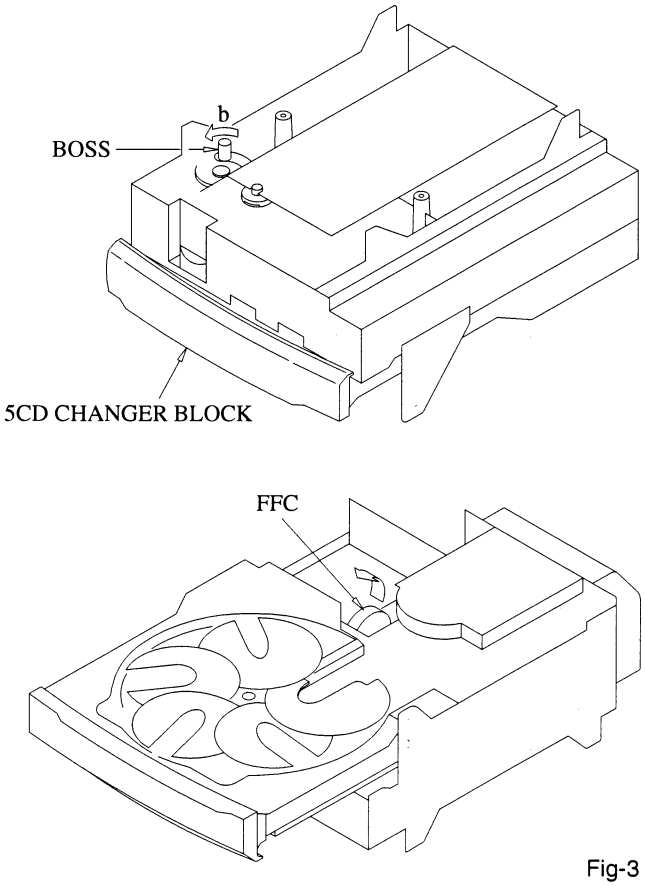


Fig-3

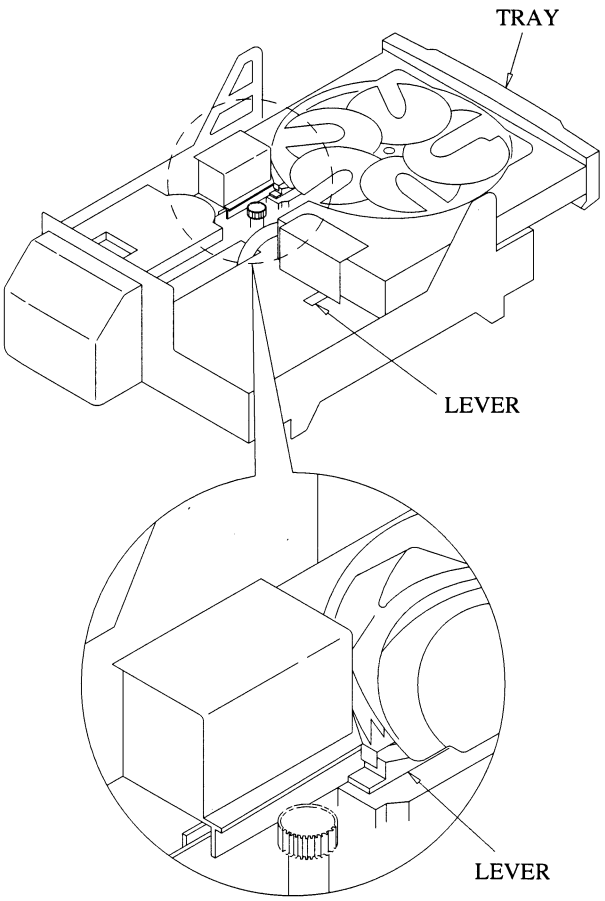


Fig-4

3-2. Reassembling procedure.

1) Confirm that LEVER TRAY is at the most right position and check for the CD Mechanism to be in the down position. (Fig-5)
2) Push in the TRAY along the rail of the CHAS MECHA.
3) After TRAY is half closed and FFC is put in, it can enter by force until the end of TRAY closed. (Fig-6)

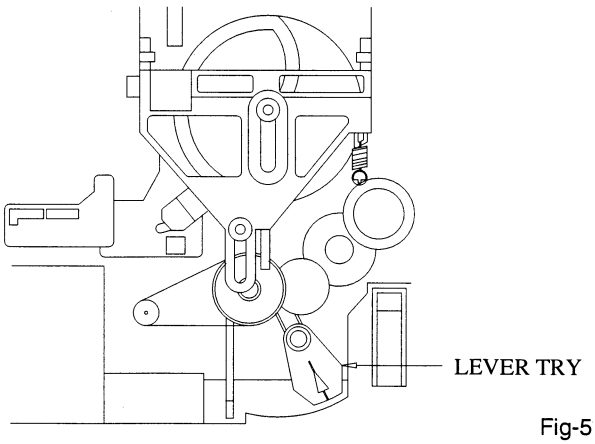


Fig-5

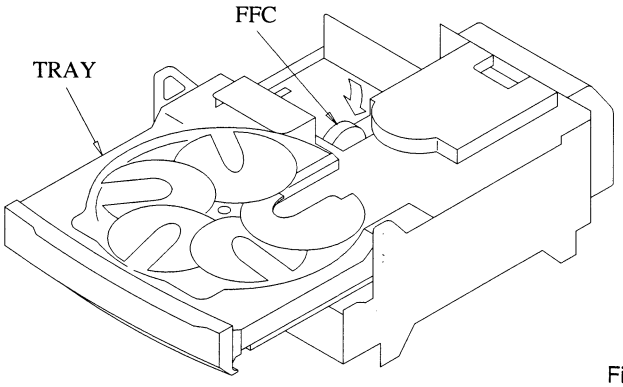


Fig-6

4. How to reassemble the TURN TABLE. (Fig-7)

1) Push LEVER TT in the direction of "C", and put in the TURN TABLE 5CD. (Fig-7)
After reassembly, one of the TURN TABLE DISC TRAY (can be either one of the five disc trays) must be aligned with TURN TABLE 5CD. (Fig-8)
That is, having no gap difference between the TURN TABLE 5CD and the TRAY 5CD.

* When reassembling the TURN TABLE 5CD, it is acceptable facing any CD number (1-5).

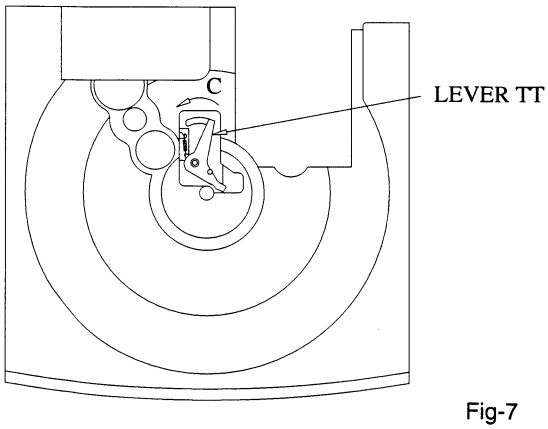


Fig-7

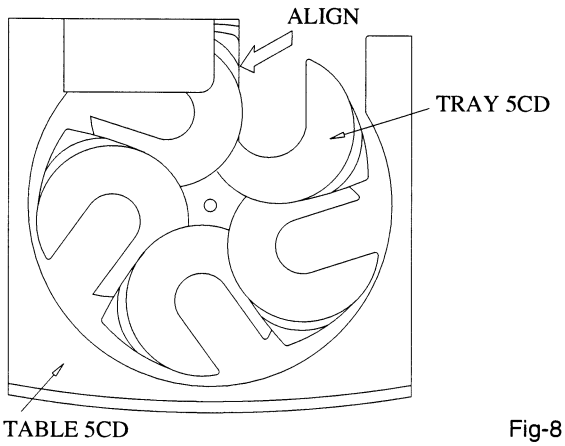


Fig-8

MODEL NO. 6ZG-1S

ELECTRICAL MAIN PARTS LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

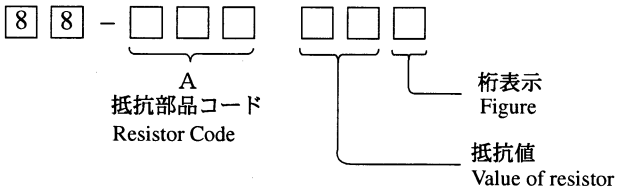
REF. NO	PART NO.	KANRI NO.	DESCRIPTION
IC			
	87-A20-547-010		C-IC,CXA1992AR
	87-A20-546-010		C-IC,CXD2589Q
	87-A20-592-040		C-IC,M51943 AML
	87-070-305-010		IC,BA6897S
	87-001-982-010		IC,TA7291S
TRANSISTOR			
	89-406-555-080		TR,2SD655 (0.5W)
	87-026-463-080		TR,2SA933S (0.3W)
	89-421-722-380		TR,2SD2172V/W
	89-320-011-080		TR,2SC2001 (15W)
	87-026-223-080		TR,DTC143TK
	89-110-155-080		TR,2SA1015(0.4W)
	87-026-608-080		C-TR,DTC 123 JK
	89-327-125-080		CHIP TR,2SC2712GR<D>
DIODE			
	87-020-465-080		DIODE,1SS133 (110MA)
CD MAIN C.B			
C1	87-010-196-020		C-CAP,S 0.1-25 F
C2	87-010-260-080		CAP, ELECT 47-25V
C4	87-010-197-020		C-CAP,S 0.01-25 B
C101	87-010-263-040		CAP,E 100-10
C102	87-010-178-020		C-CAP,S 1000P-50 B
C103	87-010-550-040		CAP,E 100-6.3 GAS
C104	87-010-182-020		C-CAP,S 2200P-50 B
C105	87-010-198-020		C-CAP,S 0.022-25 B
C106	87-016-081-020		C-CAP,S 0.1-16 RK
C107	87-016-081-020		C-CAP,S 0.1-16 RK
C108	87-016-081-020		C-CAP,S 0.1-16 RK
C109	87-010-497-040		CAP,E 4.7-35 GAS
C110	87-010-198-080		CAP, CHIP 0.022
C111	87-010-197-020		C-CAP,S 0.01-25 B
C112	87-010-402-040		CAP,E 2.2-50 SME
C113	87-010-382-040		CAP,E 22-25 SME
C114	87-010-213-020		C-CAP,S 0.015-25 B
C115	87-010-263-040		CAP,E 100-10
C116	87-010-197-020		C-CAP,S 0.01-25 B
C117	87-016-369-020		C-CAP,S 0.033-25 B K
C118	87-010-197-020		C-CAP,S 0.01-25 B
C119	87-016-369-020		C-CAP,S 0.033-25 B K
C120	87-010-197-020		C-CAP,S 0.01-25 B
C121	87-010-494-040		CAP,E 1-50 GAS
C122	87-010-154-020		C-CAP,S 10P-50 CH
C123	87-010-154-020		C-CAP,S 10P-50 CH
C124	87-010-154-020		C-CAP,S 10P-50 CH
C125	87-010-596-020		C-CAP,S 0.047-16 RK
C126	87-010-596-020		C-CAP,S 0.047-16 RK
C127	87-012-140-020		C-CAP,S 470P-50 CH
C128	87-010-596-020		C-CAP,S 0.047-16 RK
C129	87-010-198-020		C-CAP,S 0.022-25 B
C130	87-016-081-020		C-CAP,S 0.1-16 RK
C131	87-010-550-040		CAP,E 100-6.3 GAS
C132	87-010-550-040		CAP,E 100-6.3 GAS
C133	87-012-158-020		C-CAP,S 390P-50 J CH
C150	87-010-145-020		C-CAP,S 1P-50 C CH
C202	87-010-596-020		C-CAP,S 0.047-16 RK
C203	87-010-188-020		C-CAP,S 6800P-50 B
C204	87-012-156-020		C-CAP,S 220P-50 CH
C205	87-018-134-080		CAPACITOR,TC-U 0.01-16
C206	87-010-400-040		CAP,E 0.47-50
C207	87-010-197-020		C-CAP,S 0.01-25 B
C208	87-010-318-020		C-CAP,S 47P-50 CH<D>
C209	87-012-154-020		C-CAP,S 150P-50 J CH GRM
C210	87-012-154-020		C-CAP,S 150P-50 J CH GRM
C211	87-010-176-020		C-CAP,S 680P-50 J SL
C212	87-010-176-020		C-CAP,S 680P-50 J SL
C213	87-010-382-040		CAP,E 22-25 SME<D>
C213	87-010-401-040		CAP,E 1-50 SME
C214	87-010-382-040		CAP,E 22-25 SME<D>
C214	87-010-401-040		CAP,E 1-50 SME
C215	87-010-318-020		C-CAP,S 47P-50 CH
C216	87-010-318-020		C-CAP,S 47P-50 CH
C217	87-010-380-040		CAP,E 47-16 SME
C218	87-010-197-020		C-CAP,S 0.01-25 B
C219	87-010-196-020		C-CAP,S 0.1-25 F
C220	87-010-370-040		CAP,E 330-6.3 SME
C221	87-010-197-020		C-CAP,S 0.01-25 B
C222	87-010-186-020		C-CAP,S 4700P-50 B
C223	87-016-081-020		C-CAP,S 0.1-16 RK
C228	87-018-209-080		CAP, CER 0.1-50V
C230	87-016-081-020		C-CAP,S 0.1-16 RK
C231	87-018-209-080		CAP, CER 0.1-50V
C401	87-010-403-080		CAP, ELECT 3.3-50V
C402	87-010-403-040		CAP,E 3.3-50 SME
C501	87-016-459-040		CAP,E 470-10 SMG
C502	87-010-197-020		C-CAP,S 0.01-25 B
C503	87-010-263-040		CAP,E 100-10
C504	87-010-196-020		C-CAP,S 0.1-25 F
C505	87-010-196-020		C-CAP,S 0.1-25 F
C506	87-010-196-020		C-CAP,S 0.1-25 F
C507	87-010-196-020		C-CAP,S 0.1-25 F
C508	87-016-459-040		CAP,E 470-10 SMG
C509	87-010-196-020		C-CAP,S 0.1-25 F
C510	87-010-196-020		C-CAP,S 0.1-25 F
C601	87-010-197-020		C-CAP,S 0.01-25 B
C602	87-016-251-040		CAP,E 220-16 SMG
C603	87-010-196-020		C-CAP,S 0.1-25 F
C701	87-010-322-020		C-CAP,S 100P-50 CH
C702	87-010-318-020		C-CAP,S 47P-50 CH
C703	87-010-318-020		C-CAP,S 47P-50 CH
C705	87-010-178-020		C-CAP,S 1000P-50 B
C706	87-018-199-080		CAP, CER 3300P
C901	87-010-260-040		CAP,E 47-25 SME<D>
C902	87-010-196-020		C-CAP,S 0.1-25 F<D>
CN3	86-ZG1-609-010		CONN ASSY,6P
FB1	87-003-223-080		FERRITE BEAD BL02RN2
FB2	87-003-223-080		FERRITE BEAD BL02RN2
FB3	87-003-223-080		FERRITE BEAD BL02RN2
FC1	86-ZG1-605-010		CABLE,FFC 16P
FC2	86-ZG1-608-010		CABLE,FFC 8P
L28	83-XM1-617-080		C-COIL,BK2125HM601
L41	83-XM1-617-080		C-COIL,BK2125HM601
L101	87-003-102-080		COIL, 10UH
L201	87-003-102-080		COIL, 10UH
LED901	87-A40-123-010		LED,SLZ-8128A-01-B<D>
M601	87-045-305-010		MOTOR, RF-500TB DC-5V (2MA)
⚠PR1	87-026-689-080		PROTECTOR,1A 60V 491
R101	87-022-363-020		C-RES,S 68K-1/10W F
R102	87-022-363-020		C-RES,S 68K-1/10W F
R103	87-022-363-020		C-RES,S 68K-1/10W F
R104	87-022-363-020		C-RES,S 68K-1/10W F
R105	87-022-365-020		C-RES,S 100K-1/10W F
R106	87-022-365-020		C-RES,S 100K-1/10W F
R420	87-029-060-080		RES,FUSE 33-1/4 W
S601	87-036-109-010		PUSH SWITCH
S602	87-036-109-010		PUSH SWITCH
S603	87-036-109-010		PUSH SWITCH
X201	87-A70-046-010		VIB,XTAL 16.934MHZ
LED C.B			
LED701	87-017-733-080		LED,SEL1250SM
LED702	87-017-350-080		LED,SEL1550CM

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
LED703	87-017-733-080		LED,SEL1250SM
T-T C.B			
C411	87-018-214-080		CAP TC U 0.1-50F
LED411	87-070-288-010		LED,GL380
M401	87-A90-036-010		MOT ASSY,RF-300CA-11
PS401	87-A90-156-010		SNSR,SG-240
Q411	87-A30-031-010		P-TR,PT380F
S401	87-036-109-010		PUSH SWITCH

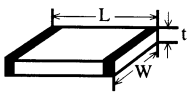
- Regarding connectors, they are not stocked as they are not the initial order items.
  The connectors are available after they are supplied from connector manufacturers upon the order is received.

○ チップ抵抗部品コード / CHIP RESISTOR PART CODE

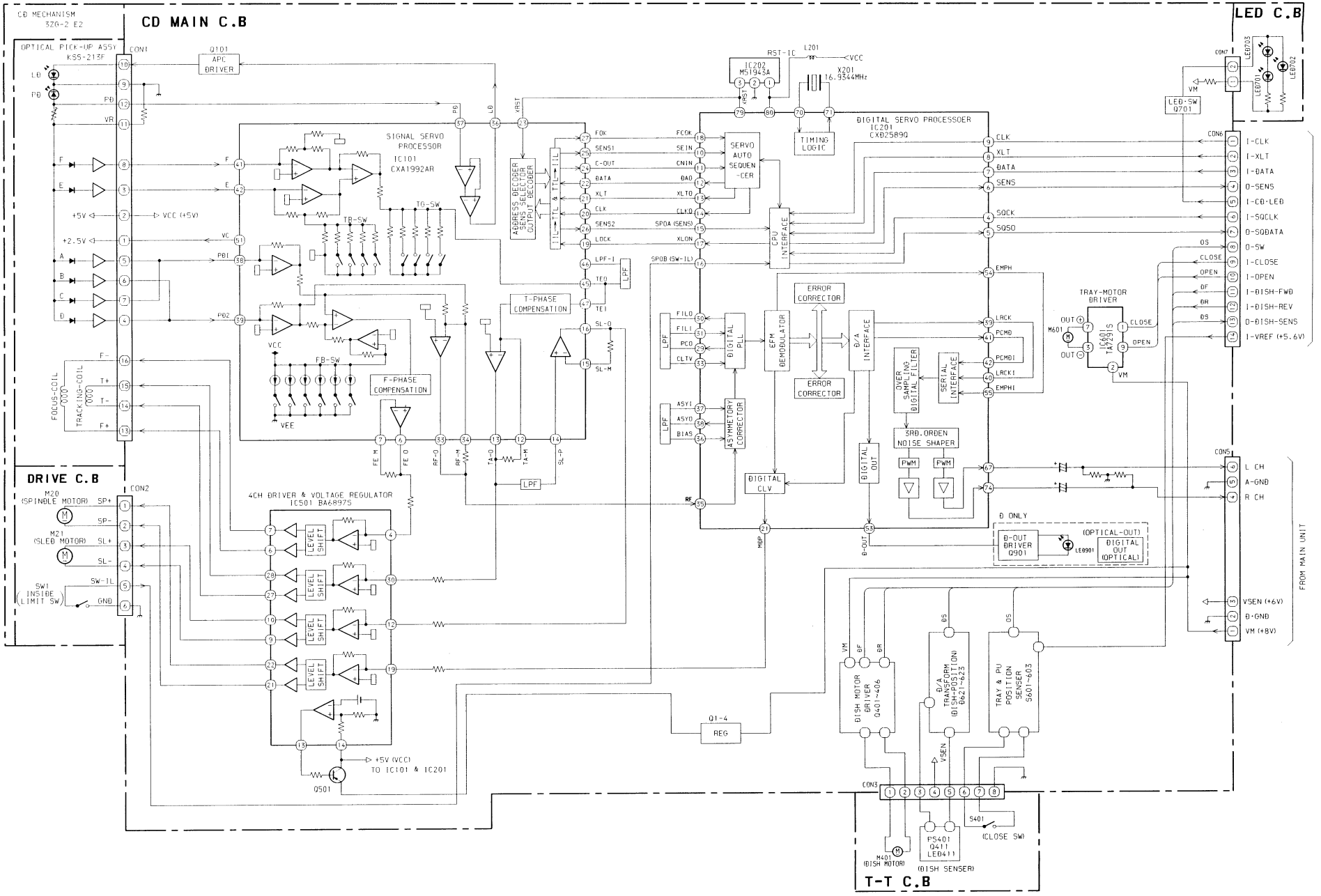
チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding

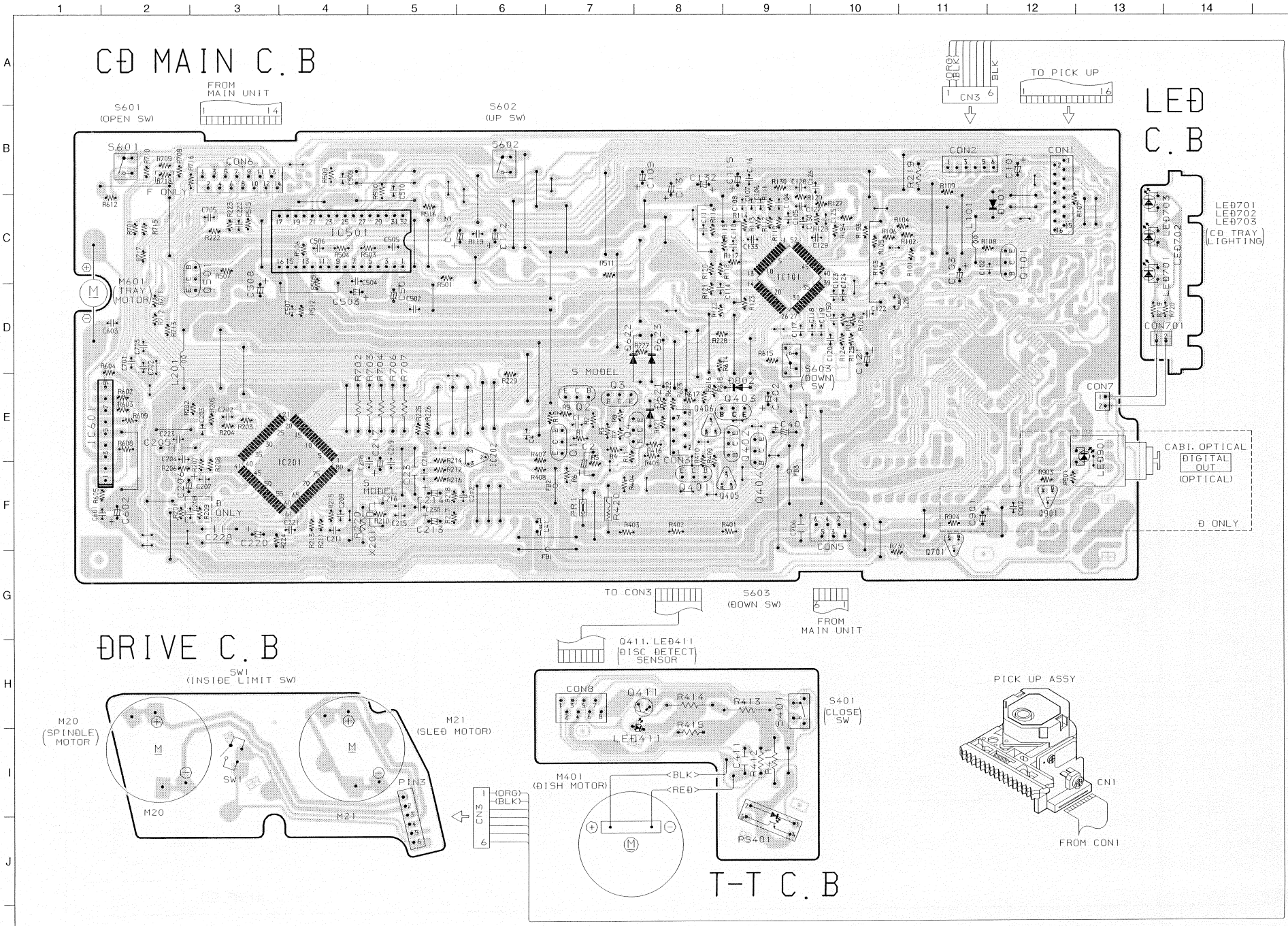


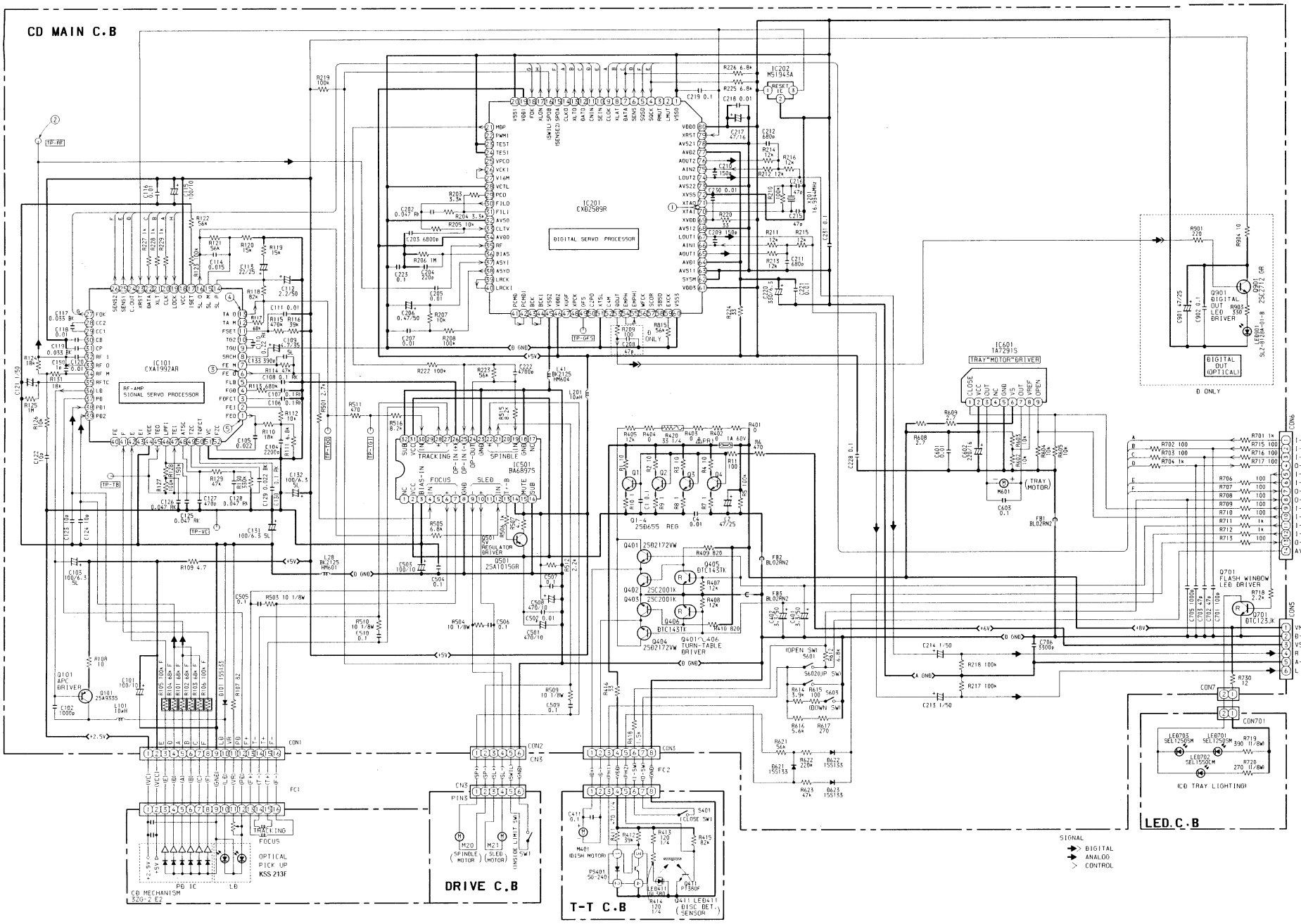
チップ抵抗
Chip resistor

容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法 / Diamensions (mm) 外形 / Form	L	W	t	抵抗コード : A Resistor Code : A
1/16W	1608	5%	CJ		1.6	0.8	0.45	108
1/10W	2125	5%	CJ		2	1.25	0.45	118
1/8W	3216	5%	CJ		3.2	1.6	0.55	128

BLOCK DIAGRAM




CD MAIN C.B
FROM MAIN UNIT
S601 (OPEN SW)
S602 (UP SW)
TO PICK UP
LED C.B
LED701
LED702
LED703
(CD TRAY LIGHTING)
CABI. OPTICAL
DIGITAL OUT
(OPTICAL)
D ONLY
F ONLY
S MODEL
M MODEL
M601 (TRAY MOTOR)
S603 (DOWN SW)
TO CON3
FROM MAIN UNIT
Q411, LED411 (DISC DETECT SENSOR)
DRIVE C.B
SW1 (INSIDE LIMIT SW)
M20 (SPINDLE MOTOR)
M21 (SLED MOTOR)
M401 (DISH MOTOR)
S401 (CLOSE SW)
PICK UP ASSY
FROM CON1
T-T C.B


CD MAIN C.B
IC201
CXD2509R
DIGITAL SERVO PROCESSOR
IC101
CXA1992AR
RF-AMP
SIGNAL SERVO PROCESSOR
IC202
M51945A
IC401
TA7291S
(TRAY"MOTOR"DRIVER)
IC501
BA6897S
TRACKING
FOCUS
SLED
SPINDLE
Q501
2SA1015GR
REGULATOR
DRIVER
Q401~Q404
2SD2172VW
TURN-TABLE
DRIVER
Q101
APC
DRIVER
Q901
DIGITAL
OUT
LED
DRIVER
DIGITAL
OUT
(OPTICAL)
D ONLY
(TRAY)
(MOTOR)
M401
(DISH MOTOR)
M20
(SPINDLE
MOTOR)
M21
(SLED
MOTOR)
S401
(CLOSE SW)
S601
(OPEN SW)
S602
(DOWN SW)
OPTICAL
PICK UP
KSS 213F
CD MECHANISM
SZG-2 E2
PD IC
LD
TRACKING
FOCUS
DRIVE C.B
T-T C.B
LED.C.B
CD TRAY LIGHTING
I-CLK
I-XLT
I-DATA
O-SENS
I-CD.LED
I-SQCLK
O-SQDATA
O-SW
I-CLOSE
I-OPEN
I-DISH FWD
I-DISH RVS
O-DISH SENS
AVREF
FROM MAIN UNIT
VM (+8V)
D-GND
VSEN (+6V)
R CH
A-GND
L CH
FROM MAIN UNIT
SIGNAL
BIGITAL
ANALOG
CONTROL

IC DESCRIPTION
IC, CXA1992AR

Pin No.	Pin Name	I/O	Description
1	FEO	O	Output terminal for focus error amplifier. Internally connected to window comparator input for bias condition.
2	FEI	I	Input terminal for focus error.
3	FDFCT	I	Capacitor connection terminal for time constant used when there is defect.
4	FGD	I	This pin is connected to GND via capacitor when high frequency gain of the focus servo is attenuated.
5	FLB	I	This is a pin where the time constant is externally connected to raise the low frequency gain of the focus servo.
6	FE_O	O	Focus drive output.
7	FEM	I	Focus amplifier inverted input pin.
8	SRCH	I	This is a pin where the time constant is externally connected to generate the focus search waveform.
9	TGU	I	This is a pin where the selection time constant is externally connected to set the tracking servo the high frequency gain.
10	TG2	I	This is a pin where the selection time constant is externally connected to set the tracking high frequency gain.
11	FSET	I	Pin for setting peak of the phase compensator of the focus tracking.
12	TA_M	I	Tracking amplifier inverted input pin.
13	TA_O	O	Tracking drive output.
14	SL_P	I	Sled amplifier non-inverted input pin.
15	SL_M	I	Sled amplifier inverted input pin.
16	SL_O	O	Sled drive output.
17	ISET	I	The current which determines height of the focus search, track jump and sled kick is input with external resistance connected.
18	Vcc	I	Power supply.
19	LOCK	I	"L" setting starts sled disorder-prevention circuit. (Not pull-up resistance)
20	CLK	I	Clock input for serial data transfer from CPU. (No pull-up resistance)
21	XLT	I	Latch input from CPU. (No pull-up resistance)
22	DATA	I	Serial data input from CPU. (No pull-up resistance)
23	XRST	I	Reset system at "L" setting. (No pull-up resistance)
24	C_OUT	O	Signal output for track number counting.
25	SENS1	O	FZC, DFCT1, TZC, BALH, TGH, FOH, or ATSC is output depending on the command from CPU.
26	SENS2	O	DFCT2, MIRR, BALL, TGL or FOL is output depending on the command from CPU.
27	FOK	O	Output terminal for focus OK comparator.
28	CC2	I	Input pin where the DEFECT bottom hold output is capacitance coupled.
29	CC1	O	DEFECT bottom-hold output terminal. Internally connected to interruption comparator input.
30	CB	I	Connection terminal for DEFECT bottom-hold capacitor.
31	CP	I	Connection terminal for MIRR hold-capacitor. Anti-reverse input terminal for MIRR comparator.

Pin No.	Pin Name	I/O	Description
32	RF_I	I	Input terminal by capacity combination of RF summing amplifier.
33	RF_O	O	Output terminal of RF summing amplifier. Checkpoint of Eye pattern.
34	RF_M	I	Anti-reverse input terminal for RF summing amplifier. The gain of RF amplifier is decided by the connection resistance between RF_M and RFO terminals.
35	RFTC	I	This is a pin where the selection time constant is externally connected to control the RF level.
36	LD	O	APC amplifier output terminal.
37	PD	I	APC amplifier input terminal.
38, 39	PD1, PD2	I	RFI-V amplifier inverted input pin. These pins are connected to the A+C and B+C pins of the optical pickup, receiving by currents input.
40	FEBIAS	I/O	Bias adjustment pin of the focus error amplifier.
41, 42	F, E	I	F and EIV amplifier inverted input pins. These pins are connected to the F and E of the optical pickup, receiving by current input.
43	EI	—	Gain adjustment pin of the I-V amplifier E. (When not in use of BAL automatic adjustment)
44	VEE	—	GND connection pin.
45	TEO	O	Output terminal for tacking-error amplifier. Output E-F signal.
46	LPFI	I	BAL adjustment comparator input pin. (Input through LPF from TEO)
47	TEI	I	Input terminal for tracking error.
48	ATSC	I	Window-comparator input terminal for detecting ATSC.
49	TZC	I	Input terminal for tracking-zero cross comparator.
50	TDFCT	I	Capacitor connection pin for the time constant used when there is defect.
51	VC	O	Output terminal for DC voltage reduced to half of VCC+VEE.
52	FZC	I	Input terminal for focus-zero cross comparator.

IC, CXD2589Q

Pin No.	Pin Name	I/O	Description
1, 20, 45, 60	VSS	—	GND.
2	LMUT	O	Lch-"0" detect flag.
3	RMUT	O	Rch-"0" detect flag.
4	SQCK	I	Clock input for SQSO read out.
5	SQSO	O	SubQ 80 bit serial output.
6	SENS	O	SENS signal output to CPU.
7	DATA	I	Serial data input from CPU.
8	XLAT	I	Latch input from CPU, Latch serial data at fall down.
9	CLOK	I	Clock input to serial data transfer from CPU.
10	SEIN	I	SENS input from SSP.
11	CNIN	I	Numbers of track jump are counted and input.
12	DATO	O	Serial data output to SSP.
13	XLTO	O	Serial-data latch output to SSP. Latch at fall down.
14	CLKO	O	Clock output for serial data transfer to SSP.
15	SPOA	I	Microcomputer expansion interface. (Input A)
16	SPOB	I	Microcomputer expansion interface. (Input B)
17	XLON	O	Microcomputer expansion interface. (Output)
18	FOK	I	Focus OK input terminal. Used for SENS output and servo-auto sequencer.
19, 46, 61, 80	VDD	—	Power supply. (+5V)
21	MDP	O	Servo control for spindle motor.
22	PWMI	I	External control input for spindle motor.
23	TEST	I	TEST terminal. (Connected to GND)
24	TESI	I	TEST terminal. (Connected to GND)
25	VPCO	O	Charge pump output for extensive EFM PLL.
26	VCKI	I	VCO2 oscillator input for extensive EFM PLL.
27	V16M	O	VCO2 oscillator output for extensive EFM PLL.
28	VCTL	I	VCO2 control voltage input for extensive EFM PLL.
29	PCO	O	Charge pump output for master PLL.
30	FILO	O	Filter (slave = digital PLL) output for master PLL.
31	FILI	I	Filter input for master PLL.
32	AVSS	—	Analog GND.
33	CLTV	I	VCO control voltage input for master.
34	AVDD	—	Analog power. (+5V)
35	RF	I	EFM signal input.
36	BIAS	I	Constant current input to asymmetry circuit.
37	ASYI	I	Comparison voltage input to asymmetry circuit.
38	ASYO	O	EFM full-swing output. (L=VSS, H=VDD)
39	LRCK	O	D/A interface, LR clock output f=FS.
40	LRCKI	I	LR clock input.
41	PCMD	O	D/A interface, serial data output. (2's COMP, MSB first)
42	PCMDI	I	D/A interface, serial data input. (2's COMP, MSB first)

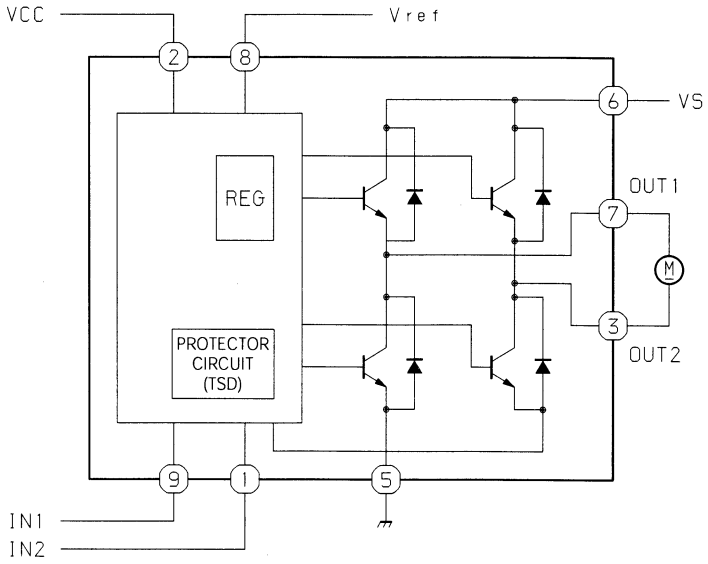
Pin No.	Pin Name	I/O	Description
43	BCK	O	D/A interface bit clock output.
44	BCKI	I	D/A interface bit clock input.
47	XUGF	O	XUGF output, MNT1 or RPCK output by switching command.
48	XPCK	O	XPLCK output, MNT0 output by switching command.
49	GFS	O	GFS output, MNT3 or XRAOF output by switching command.
50	C2PO	O	C2PO output, GTOP output by switching command.
51	XTSL	I	X'tal select input terminal, X'tal: 16.9344MHz = "L" 33.8688MHz = "H".
52	C4M	O	4.2336MHz output, Output 1/4 divided frequency of VCKI at CAV-W mode.
53	DOUT	O	Digital Out connector output signal.
54	EMPH	O	"H" when the playback disc has emphasis. "L" when it does not.
55	EMPHI	I	De-emphasis ON/OFF, "H" when ON, "L" when OFF.
56	WFCK	O	WFCK output.
57	SCOR	O	H output when the subcode sync S0 or S1 is detected.
58	SESO	O	Serial output for SubP-W.
59	EXCK	I	SBSO read out clock input.
62	SYSM	I	Mute input terminal, Active the "H" setting.
63	AVSS	—	Analogue GND.
64	AVDD	—	Analogue power supply. (+5V)
65	AOUT1	O	Lch/analogue output terminal.
66	AINI	I	Lch/OP AMP input terminal.
67	LOUT1	O	Lch/LINE output terminal.
68	AVSS	—	Analogue GND.
69	XVDD	—	Power supply for master clock.
70	XTAI	I	Input terminal for crystal oscillator circuit. Input external master clock from this terminal.
71	XTAO	O	Output terminal for crystal oscillator circuit.
72	XVSS	—	GND terminal for master clock.
73	AVSS	—	Analogue GND.
74	LOUT2	O	Rch/LINE output terminal.
75	AIN2	I	Rch/OP AMP input terminal.
76	AOUT2	O	Rch/analogue output terminal.
77	AVDD	—	Analogue power supply. (+5V)
78	AVSS	—	Analogue GND.
79	XRST	I	Reset system at "L" setting.

Note)

- PCMD is the two's complement output with MSB first.
- GTOP monitors the protection status of the Frame Sync. (H: Sync protection window opened).
- XUGF is the Frame Sync negative pulse which is obtained from the EFM signal. This is the signal before the sync protection.
- XPLCK is the inverted signal of the EFM PLL clock. The PLL works so that the fall-down edge and the changed point of the EFM signal agree.
- GFS is the signal that goes "H" when the Frame Sync and the internally inserted timing agree.
- RFCK is the signal having 136 micro-seconds (during normal speed) that is generated to have the same accuracy as X'tal.
- C2PO is the signal indicating the error status of the data.
- XRAOF is the signal that is generated when the 16k RAM goes outside the jitter margin ±4F.

IC BLOCK DIAGRAM

IC, TA7291S

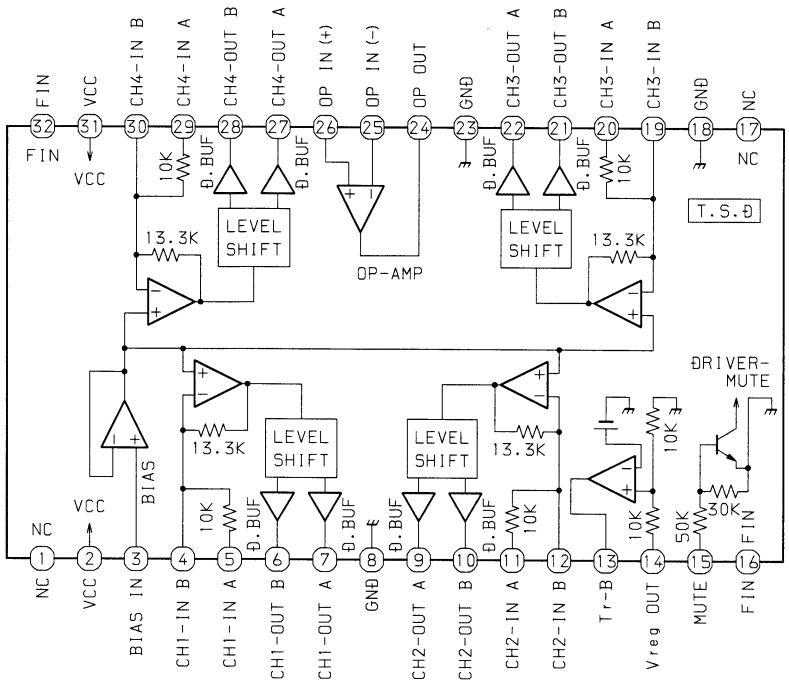


INPUT		OUTPUT		MODE
IN1	IN2	OUT1	OUT2	
0	0	∞	∞	STOP
1	0	H	L	CW/CCW
0	1	L	H	CCW/CW
1	1	L	L	BRAKE

∞ : HI IMPEDANCE

NOTE : INPUT "H" ACTIVE

IC, BA6897S



CD TEST MODE

< How to Enter the Test Mode >

Note: Target models of this test mode.
CX-ZR550
CX-ZVR55

While pressing the CD key, insert the AC power cord to AC wall outlet.

< When the Machine Has Entered the Test Mode >

The system is initialized and the main power is turned on. During the test mode, the main power of the CD block is turned on always. The test mode starts with the [Sled mode].

< Types of Test Mode >

[Sled mode]

All displays of the FL tubes light. The optical pickup can be moved by pressing [⏮] or [⏭] key.

Pressing the[□] key establishes the [Focus mode].
Pressing the [▷] key establishes the [Play mode].

Pressing the [⏮] key moves the sled to outer circumference.
Pressing the [⏭] key moves the sled to inner circumference.
Pressing OPEN/CLOSE key opens or closes the tray.

[Focus mode]

Lighting of all displays of the FL tubes are turned off and returns to normal display. The focus search is performed in the focus mode regardless whether disc is inserted or not, or focus OK or NG. (Numbers of times of focus search is unlimited. Auto sequence is not used.)
Focus servo is not locked in even the focus is obtained.

Pressing the [▷] key establishes the [Play mode].
Pressing the [⏮] key decreases the track number to -1.
Pressing the [⏭] key increases the track number to +1.
Pressing OPEN/CLOSE key opens or closes the tray.
The machine enters the [Sled mode].

[Play mode]

Lighting of all displays of the FL tubes are turned off and returns to normal display. The focus search (numbers of search is unlimited) is performed. When focus comes to in-focus, the focus servo is locked in and the machines enters the normal play mode.
During [Play mode], GFS and sound skipping are not monitored.
When focus becomes out-of-focus, another attempt is made to search for focus.
The tracking servo and the sled servo can be turned on and off by pressing the [▷] key.

Pressing the [□] key establishes the [Sled mode].
The [▷] display can be turned on and off by pressing the [⏸] key .

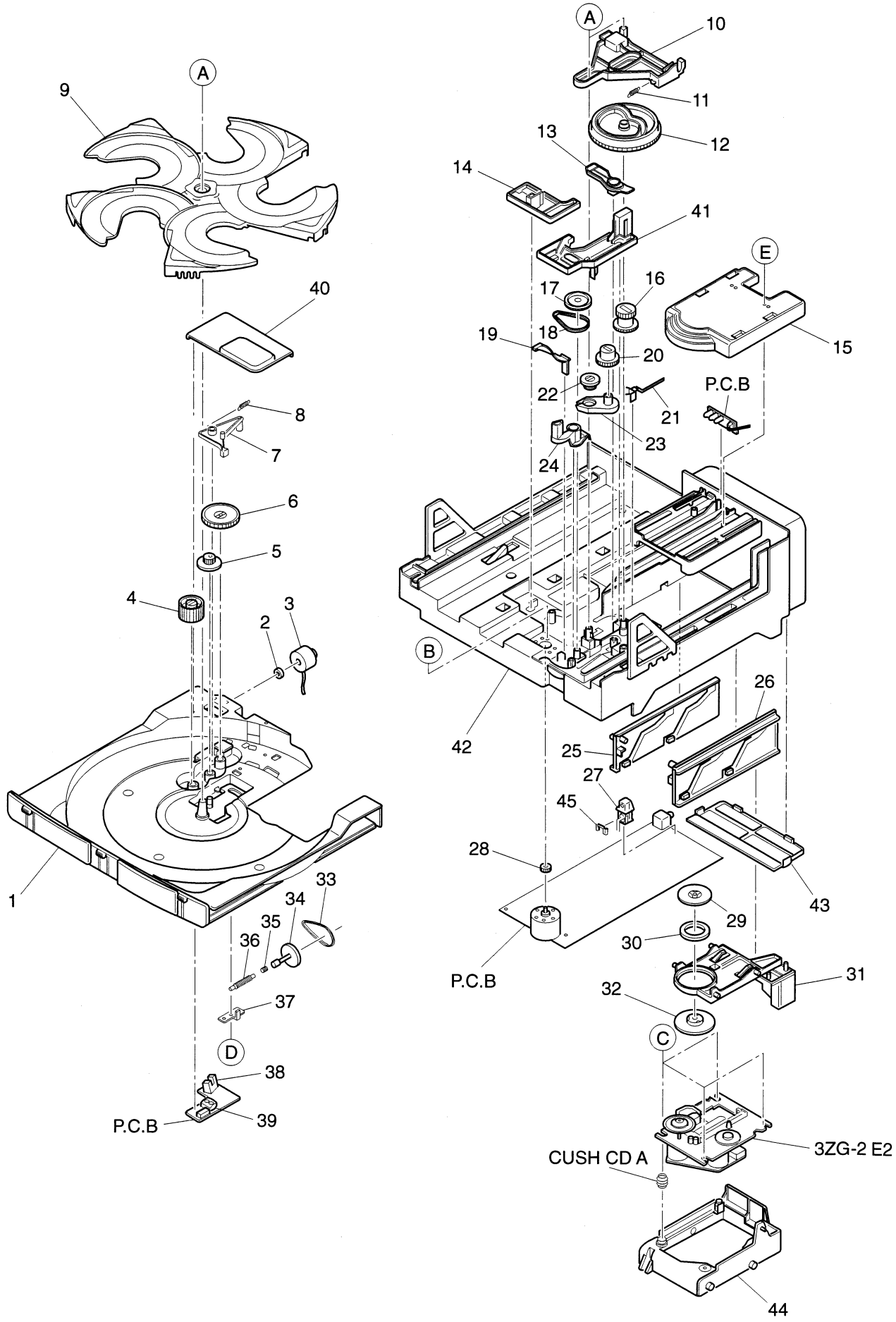
While the [⏸] display is turned off:
CLV-A Tracking servo: on
Sled servo: on
While the [⏸] display is turned on:
CLV-A Tracking servo: off
Sled servo: off

Pressing the [⏮] key decreases the track number to -1.
Pressing the [⏭] key increases the track number to +1.
Pressing OPEN/CLOSE key opens or closes the tray.
The machine enters the [Sled mode].

< How to Exit the Test Mode >

Remove the AC power cord from power outlet, or turn off the system power.

MECHANICAL EXPLODED VIEW 1/1

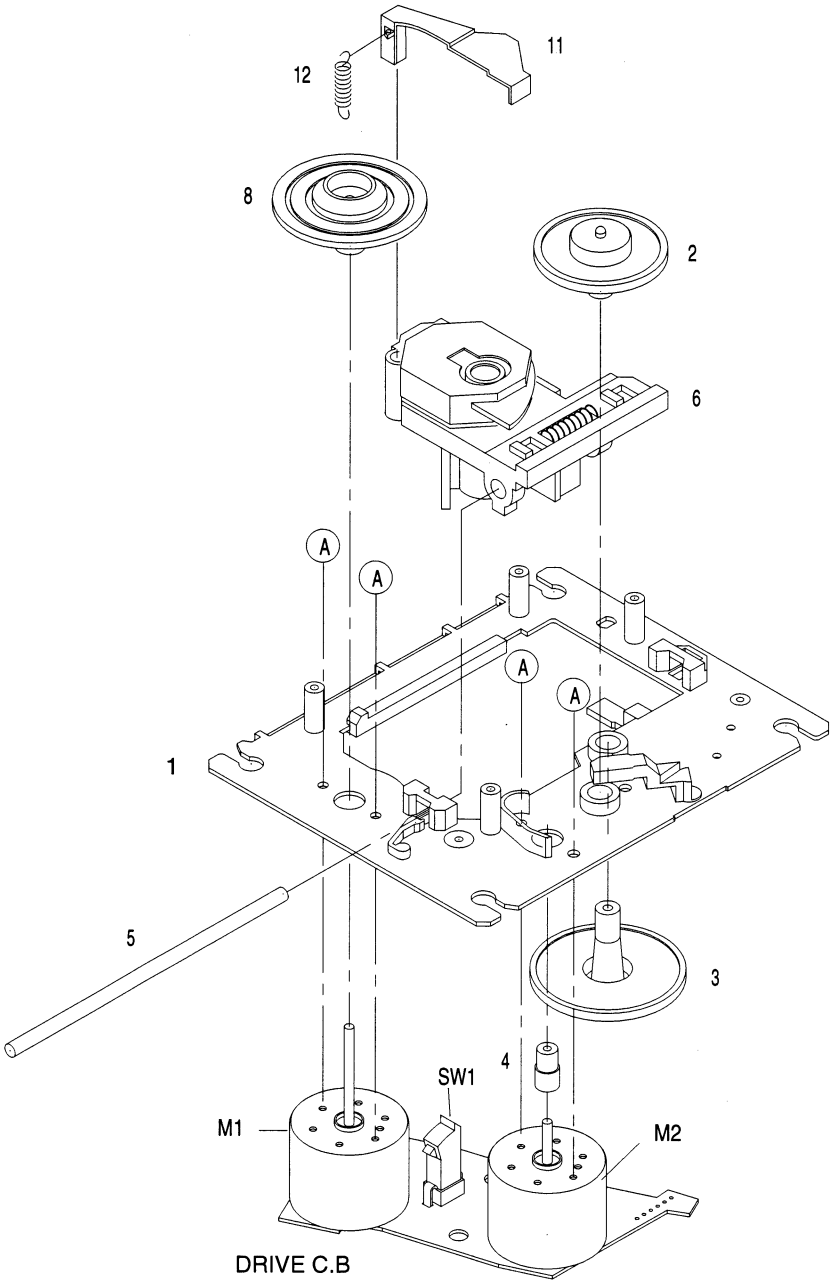


MECHANICAL PARTS LIST 1/1

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	86-ZG1-001-310		TRAY,5CD
2	81-ZG1-212-010		PULLY,LOAD MO
3	87-A90-036-010		MOT ASSY,RF-300CA-11
4	86-ZG1-228-110		GEAR,TT-B
5	86-ZG1-227-110		GEAR,TT-A
6	86-ZG1-223-110		GEAR,WORM-WHEEL TT
7	86-ZG1-224-110		LEVER,TT(*)
8	86-ZG1-226-010		SPR-E,LEVER TT
9	86-ZG1-002-210		TURN TABLE,5CD
10	86-ZG1-211-210		JOINT,CAM
11	86-ZG1-216-010		SPR-E,JT
12	86-ZG1-203-210		GEAR,MAIN CAM
13	86-ZG1-213-110		LEVER,LOAD
14	86-ZG1-214-110		LEVER,PROTECT
15	86-ZG1-004-010		REFLECTOR,CD
16	86-ZG1-205-110		GEAR,TRAY
17	84-ZG1-207-010		PULLEY,RELAY
18	84-ZG1-209-010		BELT,SQ1.8-117.7
19	86-ZG1-217-010		LEVER,SW
20	86-ZG1-206-110		GEAR,RELAY B
21	86-ZG1-220-110		SPR-P,LOCK
22	86-ZG1-204-110		GEAR,RELAY A
23	86-ZG1-218-110		PLATE,GEAR
24	86-ZG1-208-010		LEVER,TRAY
25	86-ZG1-209-110		SLIDER,CAM L(*)
26	86-ZG1-210-110		SLIDER,CAM R(*)
27	84-ZG1-244-310		CABI,OPTICAL<S2>
28	84-ZG2-228-010		PULLEY,MOT
29	83-ZG3-211-010		PLATE,DISC
30	83-ZG3-602-010		RING,MAG
31	86-ZG1-215-010		HLDR,CHUCK
32	86-ZG1-238-010		HLDR,MAGNET 6ZG N
33	86-ZG1-225-010		BELT,SQ1.2-32.9
34	86-ZG1-221-010		PULLEY,TT
35	86-ZG1-231-010		SPR-C,WORM
36	84-ZG1-256-010		GEAR,WORM N2
37	86-ZG1-232-010		SPR-P,WORM
38	86-ZG1-229-010		HLDR,SENSOR
39	86-ZG1-230-010		HLDR,DISC SENSOR
40	86-ZG1-003-110		COVER,TRAY
41	86-ZG1-212-310		SLIDER,LOAD
42	86-ZG1-201-210		CHAS,MECHA<S2,S>
42	86-ZG1-240-010		CHAS,MECHA T2<S3>
43	86-ZG1-005-110		COVER,CHAS
44	86-ZG1-202-110		HLDR,MECHA
45	84-ZG1-261-010		LID,OPTICAL
A	87-078-148-010		VFT2+3-12(F10) BLK
B	87-251-072-410		U+2.6-5
C	81-ZG1-254-010		S-SCREW,MECH HLDR
D	87-067-579-010		TAPPING SCREW, BVT2+3-8
E	87-067-703-010		TAPPING SCREW, BVT2+3-10

CD MECHANISM EXPLODED VIEW 1/1 (3ZG-1 E2)



CD MECHANISM PARTS LIST 1/1 (3ZG-1 E2)

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	83-ZG2-247-210		CHAS ASSY,SHT5
2	83-ZG2-235-010		GEAR,A3
3	83-ZG2-205-210		GEAR,B
4	83-ZG2-236-010		GEAR MOTOR 3
5	83-ZG2-240-010		SHAFT,SLIDE 3
6	87-A90-836-010		PICKUP,KSS-213F
8	83-ZG2-227-010		TURN TABLE,C1
11	83-ZG2-245-110		LEVER,SHUTTER
12	83-ZG2-250-010		SPR-E,SHT 2
A	87-261-032-210		SCREW V+2-3

MODEL NO. 6ZG-1S2

ELECTRICAL MAIN PARTS LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

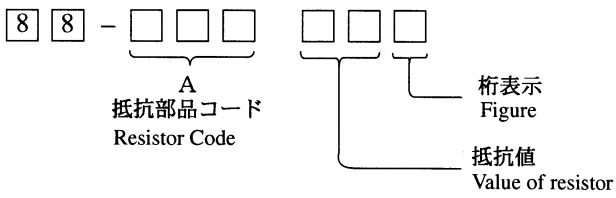
REF. NO	PART NO.	KANRI NO.	DESCRIPTION
IC			
	87-A20-547-010		C-IC,CXA1992AR
	87-A20-546-010		C-IC,CXD2589Q
	87-A20-592-040		C-IC,M51943 AML<D>
	87-001-792-080		IC,NJM2100M<D>
	87-070-305-010		IC,BA6897S<D>
	87-A20-856-010		IC,BA6898S
	87-001-982-010		IC,TA7291S
	86-ZG1-649-010		C-IC,UPD789026GB-510-MTX
TRANSISTOR			
	89-406-555-080		TR,2SD655 (0.5W)
	87-026-245-080		TR,DTC114ES
	87-026-235-080		CHIP-TR,DTC114EK
	87-026-463-080		TR,2SA933S (0.3W)
	89-324-123-080		C-TR,2SC2412K S<D>
	87-026-227-080		CHIP-TR,DTA114EK<D>
	89-421-722-380		TR,2SD2172V/W
	89-320-011-080		TR,2SC2001 (15W)
	87-026-239-080		TR,DTC114TK (0.2W)<D>
	87-026-223-080		TR,DTC143TK
	89-110-155-080		TR,2SA1015(0.4W)<D>
	89-213-292-380		TR,2SB1329QR
	87-026-608-080		C-TR,DTC 123 JK
	87-A30-075-080		C-TR,2SA1235F<D>
	89-327-125-080		CHIP TR,2SC2712GR<D>
DIODE			
	87-A40-348-080		ZENER,MTZJ3.3A
	87-027-583-080		ZENER,HZ9B1L (200MA)
	87-020-465-080		DIODE,1SS133 (110MA)<D>
	87-A40-291-080		DIODE,1N4148 (CPT)
CD MAIN C.B			
C1	87-010-196-080		CHIP CAPACITOR,0.1-25
C2	87-010-260-080		CAP, ELECT 47-25V
C3	87-010-221-040		CAP,E 470-10 SME
C4	87-010-197-020		C-CAP,S 0.01-25 B
C5	87-010-184-020		C-CAP,S 3300P-50 B
C101	87-010-263-040		CAP,E 100-10<D>
C101	87-010-550-040		CAP,E 100-6.3 GAS
C102	87-010-178-020		C-CAP,S 1000P-50 B
C103	87-010-550-040		CAP,E 100-6.3 GAS
C104	87-010-182-020		C-CAP,S 2200P-50 B
C105	87-010-198-020		C-CAP,S 0.022-25 B
C106	87-016-081-080		C-CAP,S 0.1-16 RK
C107	87-016-081-080		C-CAP,S 0.1-16 RK
C108	87-016-081-080		C-CAP,S 0.1-16 RK
C109	87-010-497-040		CAP,E 4.7-35 GAS<D>
C109	87-010-404-040		CAP,E 4.7-50 SME
C110	87-016-081-080		C-CAP,S 0.1-16 RK
C111	87-010-197-020		C-CAP,S 0.01-25 B
C112	87-010-402-040		CAP,E 2.2-50 SME
C113	87-010-382-040		CAP,E 22-25 SME
C114	87-010-213-020		C-CAP,S 0.015-25 B
C115	87-010-263-040		CAP,E 100-10
C116	87-010-197-020		C-CAP,S 0.01-25 B
C117	87-016-369-020		C-CAP,S 0.033-25 B K
C117	87-010-186-020		C-CAP,S 4700P-50 B<D>
C118	87-010-197-020		C-CAP,S 0.01-25 B
C119	87-016-369-020		C-CAP,S 0.033-25 B K
C120	87-010-197-020		C-CAP,S 0.01-25 B
C121	87-010-494-040		CAP,E 1-50 GAS<D>
C121	87-010-401-040		CAP,E 1-50 SME
C122	87-010-154-020		C-CAP,S 10P-50 CH
C123	87-010-154-020		C-CAP,S 10P-50 CH
C124	87-010-154-020		C-CAP,S 10P-50 CH
C125	87-010-596-020		C-CAP,S 0.047-16 RK
C126	87-010-596-020		C-CAP,S 0.047-16 RK
C127	87-012-140-020		C-CAP,S 470P-50 CH
C128	87-010-596-020		C-CAP,S 0.047-16 RK
C129	87-010-198-020		C-CAP,S 0.022-25 B
C130	87-016-081-080		C-CAP,S 0.1-16 RK
C131	87-010-550-040		CAP,E 100-6.3 GAS
C132	87-010-550-040		CAP,E 100-6.3 GAS
C133	87-012-158-020		C-CAP,S 390P-50 J CH
C150	87-010-145-020		C-CAP,S 1P-50 C CH<D>
C202	87-010-596-020		C-CAP,S 0.047-16 RK
C203	87-010-188-020		C-CAP,S 6800P-50 B
C204	87-012-156-020		C-CAP,S 220P-50 CH
C205	87-018-133-080		CAPACITOR,CER 4700P-16V<D>
C205	87-018-134-080		CAPACITOR,TC-U 0.01-16
C206	87-010-400-040		CAP,E 0.47-50
C207	87-010-197-020		C-CAP,S 0.01-25 B
C208	87-010-318-020		C-CAP,S 47P-50 CH<D>
C209	87-012-154-020		C-CAP,S 150P-50 J CH GRM
C210	87-012-154-020		C-CAP,S 150P-50 J CH GRM
C211	87-010-176-020		C-CAP,S 680P-50 J SL
C212	87-010-176-020		C-CAP,S 680P-50 J SL
C213	87-010-400-040		CAP,E 0.47-50
C213	87-010-382-040		CAP,E 22-25 SME<D>
C214	87-010-400-040		CAP,E 0.47-50
C214	87-010-382-040		CAP,E 22-25 SME<D>
C215	87-010-318-020		C-CAP,S 47P-50 CH
C216	87-010-318-020		C-CAP,S 47P-50 CH
C217	87-010-101-040		CAP,E 220-16 SME
C217	87-010-380-040		CAP,E 47-16 SME<D>
C218	87-010-197-020		C-CAP,S 0.01-25 B
C219	87-010-196-020		C-CAP,S 0.1-25 F
C220	87-010-370-040		CAP,E 330-6.3 SME
C221	87-010-197-080		CAP, CHIP 0.01 DM
C222	87-010-186-020		C-CAP,S 4700P-50 B
C223	87-016-081-020		C-CAP,S 0.1-16 RK
C224	87-010-805-080		CAP, S 1-16
C228	87-018-134-080		CAPACITOR,TC-U 0.01-16
C230	87-018-209-080		CAP, CER 0.1-50V<D>
C231	87-018-209-080		CAP, CER 0.1-50V<D>
C231	87-018-134-080		CAPACITOR,TC-U 0.01-16
C301	87-010-101-080		CAP, ELECT 220-16<D>
C302	87-010-263-080		CAP, ELECT 100-10V<D>
C305	87-010-318-020		C-CAP,S 47P-50 CH<D>
C306	87-010-318-020		C-CAP,S 47P-50 CH<D>
C307	87-010-405-080		CAP, ELECT 10-50V<D>
C308	87-010-405-080		CAP, ELECT 10-50V<D>
C401	87-010-403-080		CAP, ELECT 3.3-50V
C402	87-010-403-040		CAP,E 3.3-50 SME
C501	87-010-555-040		CAP,E 100-10 GAS
C501	87-016-459-040		CAP,E 470-10 SMG<D>
C502	87-010-197-020		C-CAP,S 0.01-25 B
C503	87-010-263-040		CAP,E 100-10<D>
C503	87-010-555-040		CAP,E 100-10 GAS
C504	87-010-196-020		C-CAP,S 0.1-25 F
C505	87-010-196-020		C-CAP,S 0.1-25 F
C506	87-010-196-020		C-CAP,S 0.1-25 F
C507	87-010-196-020		C-CAP,S 0.1-25 F
C508	87-010-221-040		CAP,E 470-10 SME
C508	87-016-459-040		CAP,E 470-10 SMG<D>
C509	87-010-196-020		C-CAP,S 0.1-25 F
C510	87-010-196-020		C-CAP,S 0.1-25 F
C511	87-010-221-040		CAP,E 470-10 SME
C512	87-010-197-020		C-CAP,S 0.01-25 B
C601	87-010-197-020		C-CAP,S 0.01-25 B
C602	87-016-251-040		CAP,E 220-16 SMG<D>
C602	87-010-385-010		CAP,E 220-25
C603	87-010-196-020		C-CAP,S 0.1-25 F
C701	87-010-322-020		C-CAP,S 100P-50 CH<D>
C702	87-010-318-020		C-CAP,S 47P-50 CH<D>

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
C703	87-010-318-020		C-CAP,S 47P-50 CH<D>
C705	87-010-178-020		C-CAP,S 1000P-50 B<D>
C705	87-010-322-020		C-CAP,S 100P-50 CH
C706	87-018-209-080		CAP, CER 0.1-50V<D>
C801	87-010-263-040		CAP,E 100-10
C802	87-010-197-020		C-CAP,S 0.01-25 B
C803	87-010-318-020		C-CAP,S 47P-50 CH
C804	87-010-318-020		C-CAP,S 47P-50 CH
C807	87-010-318-020		C-CAP,S 47P-50 CH
C808	87-010-318-020		C-CAP,S 47P-50 CH
C809	87-010-318-020		C-CAP,S 47P-50 CH
C810	87-010-318-020		C-CAP,S 47P-50 CH
C901	87-010-260-080		CAP, ELECT 47-25V<D>
C901	87-010-260-040		CAP,E 47-25 SME<D>
C902	87-010-196-020		C-CAP,S 0.1-25 F<D>
C902	87-010-196-080		CHIP CAPACITOR,0.1-25<D>
CN2	86-ZG1-609-010		CONN ASSY,6P
CON1	87-A60-424-010		CONN,16P V TOC-B
CON2	87-009-034-010		CONN,6P PH V
CON3	87-A60-133-010		CONN,8P V FE
CON5	87-A60-154-010		CONN,6P H FE
CON6	87-099-033-010		16P 6216 H<D>
CON6	87-A60-160-010		CONN,12P H FE
CON301	87-009-346-010		CONN,3P PH H<D>
CON302	87-009-350-010		CONN,7P PH H<D>
FB9	87-A50-192-080		C-COIL,S BLM21P300S
FB50	87-A50-192-080		C-COIL,S BLM21P300S
FB75	87-008-372-080		FILTER, EMI BL OIRNI
FB84	87-008-372-080		FILTER, EMI BL OIRNI
FB90	87-003-223-010		FERRITE BEAD BLO2RN2
FB94	87-003-223-010		FERRITE BEAD BLO2RN2
FB101	83-XM1-617-080		C-COIL,BK2125HM601
FB301	87-008-372-080		FILTER, EMI BL OIRNI<D>
FB401	87-008-372-080		FILTER, EMI BL OIRNI<D>
FC1	86-ZG1-605-010		CABLE,FFC 16P
FC2	86-ZG1-667-010		F-CABLE,8P 1.25 175MM BLACK
L31	87-003-102-080		COIL, 10UH
L101	87-003-102-080		COIL, 10UH
L201	87-003-102-080		COIL, 10UH<D>
LED901	87-A40-123-010		LED,SLZ-8128A-01-B<D>
M601	87-045-305-010		MOTOR, RF-500TB DC-5V (2MA)
R101	87-022-363-020		C-RES,S 68K-1/10W F
R102	87-022-363-020		C-RES,S 68K-1/10W F
R103	87-022-363-020		C-RES,S 68K-1/10W F
R104	87-022-363-020		C-RES,S 68K-1/10W F
R105	87-022-365-020		C-RES,S 100K-1/10W F
R106	87-022-365-020		C-RES,S 100K-1/10W F
R301	87-025-337-080		RESISTOR, 1/4W 47<D>
R420	87-029-060-080		RES,FUSE 33-1/4 W
S601	87-036-109-010		PUSH SWITCH
S602	87-036-109-010		PUSH SWITCH
S603	87-036-109-010		PUSH SWITCH
X201	87-A70-046-010		VIB,XTAL 16.934MHZ
X801	87-A70-075-080		VIB,CER 4.19MHZ CRHF
LED C.B			
LED701	87-017-733-080		LED,SEL1250SM
LED702	87-017-350-080		LED,SEL1550CM
LED703	87-017-733-080		LED,SEL1250SM
T-T C.B			
C411	87-018-214-080		CAP TC U 0.1-50F
CON8	87-A60-156-010		CONN,8P H FE
LED411	87-070-288-010		LED,GL380
M401	87-A90-036-010		MOT ASSY,RF-300CA-11
PS401	87-A90-156-010		SNSR,SG-240
Q411	87-A30-031-010		P-TR,PT380F
S401	87-036-109-010		PUSH SWITCH

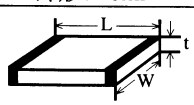
- Regarding connectors, they are not stocked as they are not the initial order items.
  The connectors are available after they are supplied from connector manufacturers upon the order is received.

○ チップ抵抗部品コード / CHIP RESISTOR PART CODE

チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding



チップ抵抗
Chip resistor

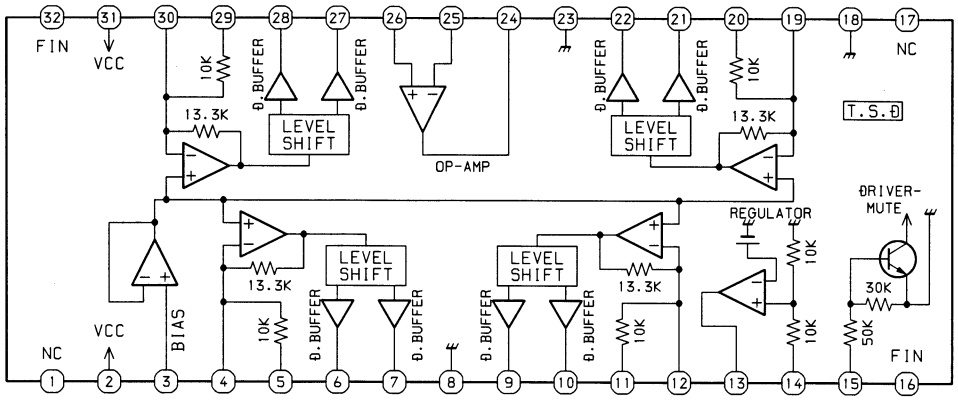
容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法 / Diamensions (mm) 外形 / Form	L	W	t	抵抗コード : A Resistor Code : A
1/16W	1608	5%	CJ		1.6	0.8	0.45	108
1/10W	2125	5%	CJ		2	1.25	0.45	118
1/8W	3216	5%	CJ		3.2	1.6	0.55	128

Refer to the following pages for the common section.

- IC DESCRIPTION ..... See page 17
- MECHANICAL EXPLODED VIEW ..... See page 23
- MECHANICAL PARTS LIST ..... See page 24
- CD MECHANISM EXPLODED VIEW ..... See page 25
- CD MECHANISM PARTS LIST ..... See page 25

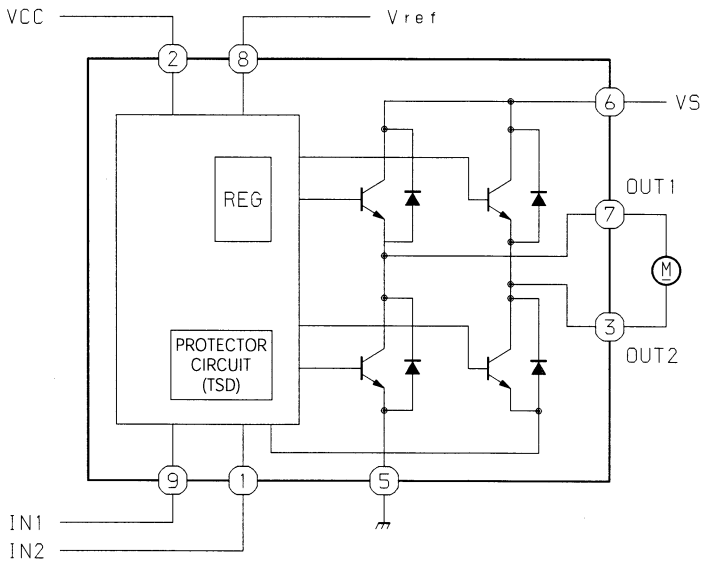
IC BLOCK DIAGRAM

IC, BA6898S



T.S.Ð:Thermal shift down circuit
Ð.BUFFER:Ðrive Buffer

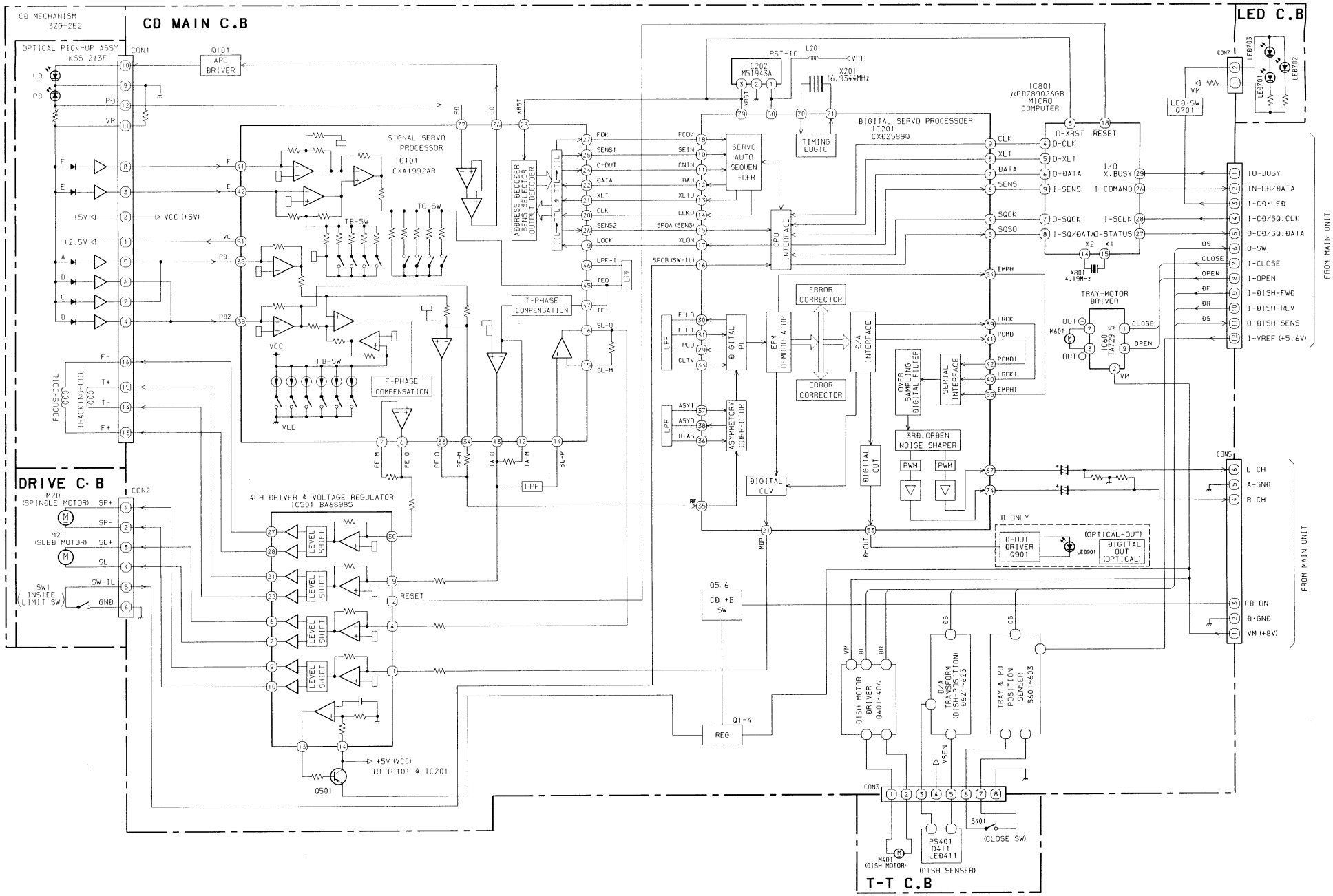
IC, TA7291S

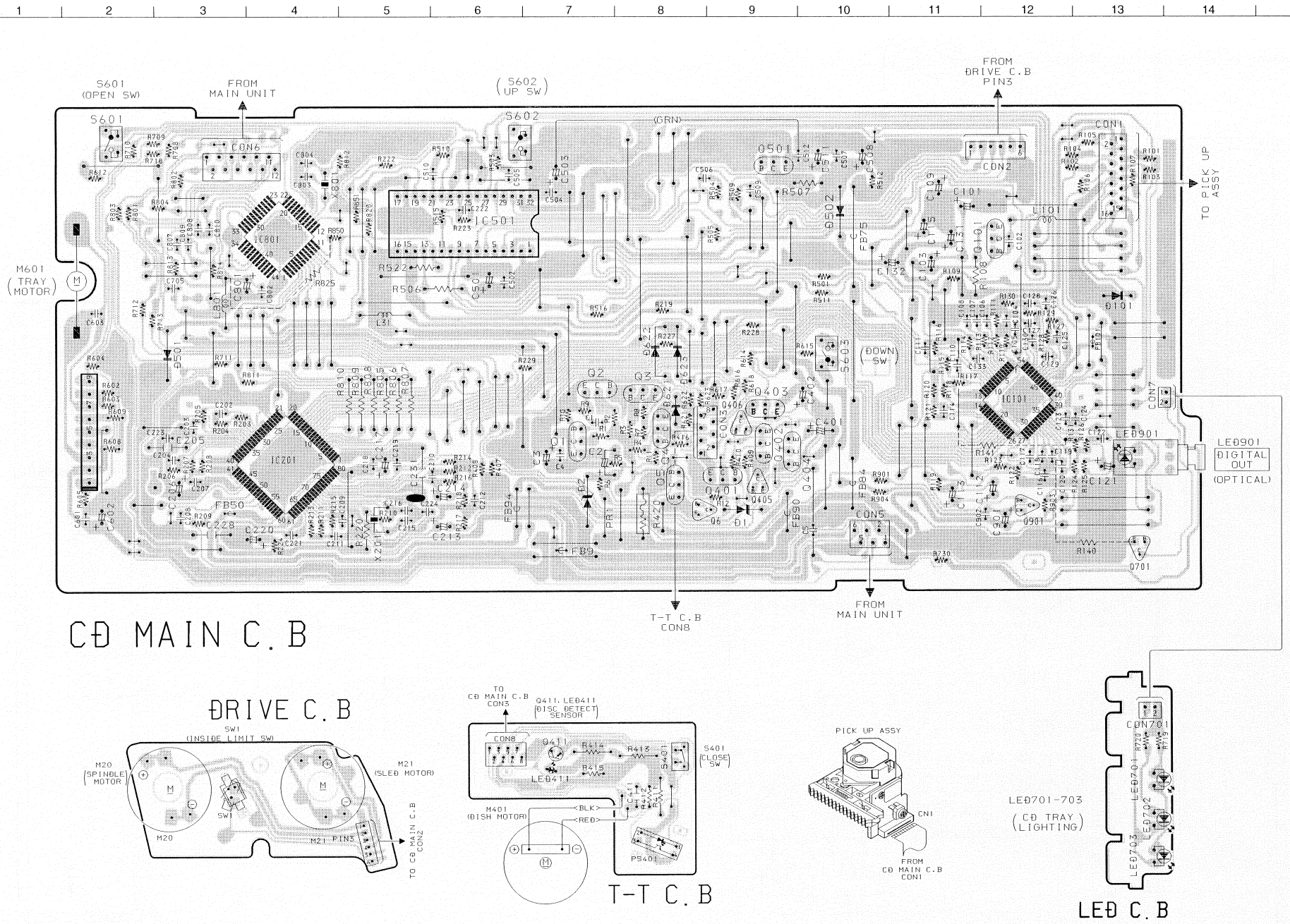


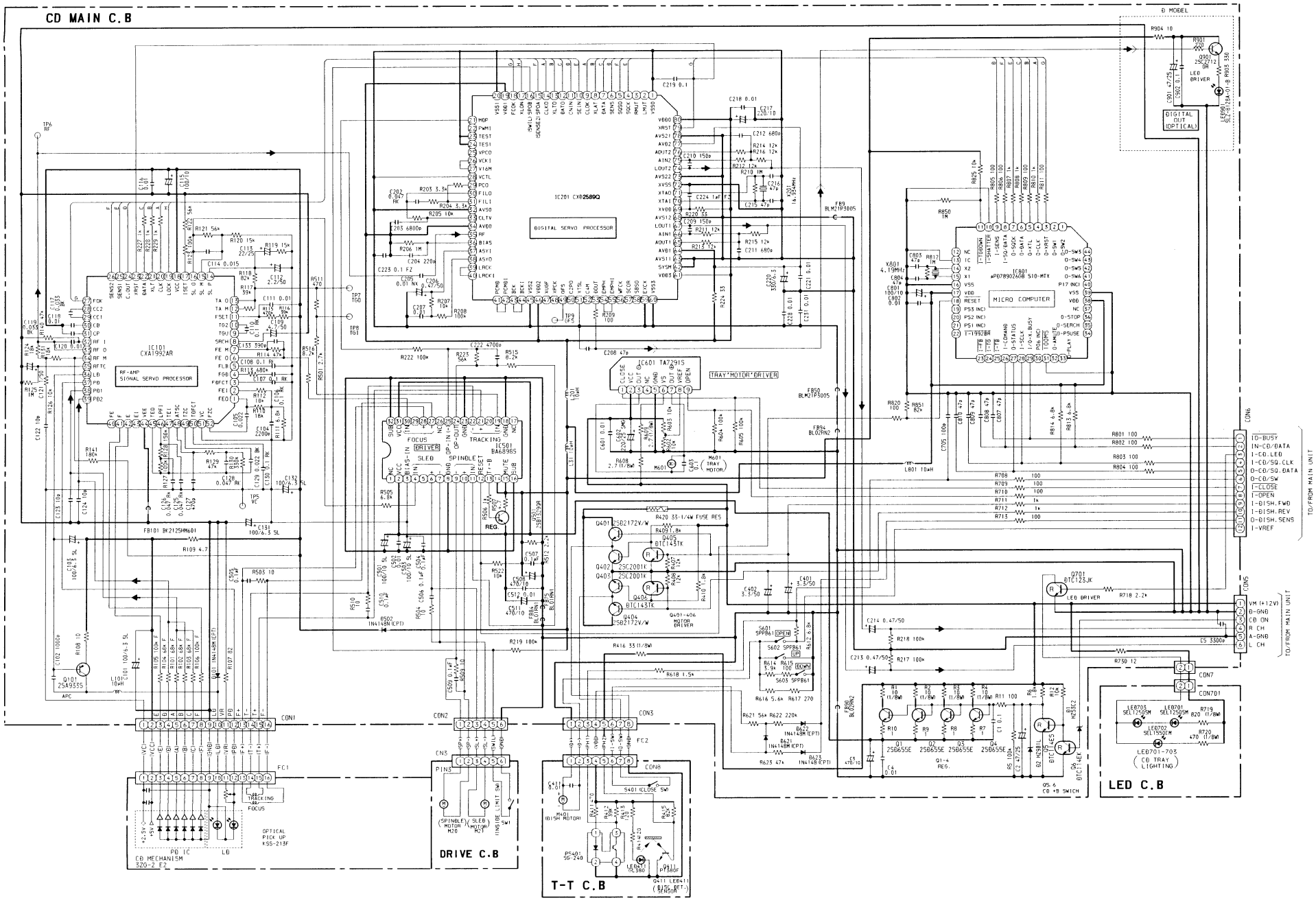
INPUT		OUTPUT		MODE
IN1	IN2	OUT1	OUT2	
0	0	∞	∞	STOP
1	0	H	L	CW/CCW
0	1	L	H	CCW/CW
1	1	L	L	BRAKE

∞ : HI IMPEDANCE
NOTE : INPUT "H" ACTIVE

BLOCK DIAGRAM




S601
(OPEN SW)
FROM
MAIN UNIT
S602
(UP SW)
FROM
DRIVE C.B
PIN3
TO PICK UP
ASSY
M601
(TRAY
MOTOR)
(GRN)
(DOWN
SW)
LED901
DIGITAL
OUT
(OPTICAL)
T-T C.B
CON8
FROM
MAIN UNIT
CD MAIN C.B
DRIVE C.B
SW1
(INSIDE LIMIT SW)
M20
(SPINDLE
MOTOR)
M21
(SLED MOTOR)
TO CD MAIN C.B
CON2
TO
CD MAIN C.B
CON3
Q411, LED411
(DISC DETECT
SENSOR)
M401
(DISH MOTOR)
BLK
RED
S401
(CLOSE
SW)
T-T C.B
PICK UP ASSY
CN1
FROM
CD MAIN C.B
CON1
LED701-703
(CD TRAY
LIGHTING)
LED C.B


CD MAIN C.B
IC201 CXD2589Q
DIGITAL SERVO PROCESSOR
IC101 CXA1992AR
RF-AMP SIGNAL SERVO PROCESSOR
MICRO COMPUTER
IC601 TA7291S
TRAY MOTOR DRIVER
IC501 BA6898S
FOCUS DRIVER
TRACKING DRIVER
SLED DRIVER
SPINDLE DRIVER
Q401-406 MOTOR DRIVER
Q701 DTC123JK
LED DRIVER
D MODEL
DIGITAL OUT (OPTICAL)
CON6
CON5
CON7
CON1
CON2
CON3
CON8
TO/FROM MAIN UNIT
OPTICAL PICK UP KSS-213F
CD MECHANISM 3ZG-2 E2
DRIVE C.B
T-T C.B
LED C.B
LED701-703 (CD TRAY LIGHTING)

IC DESCRIPTION

IC, μPD789026GB

Pin No.	Pin Name	I/O	Description
1	O-SW1	O	Not used.
2	O-SW2	O	
3	O-XRST	O	XRST input to DSP. Low output during 100 m seconds after about 100 m seconds of resetting the system.
4	O-CLK	O	Clock input to DSP.
5	O-XTL	O	Latch input to DSP.
6	O-DATA	O	Data input to DSP.
7	O-SQCK	O	SUB-Q data read-out clock to DSP.
8	I-SQ-DATA	I	SUB-Q input from DSP.
9	I-SENS	I	SENS input from DSP.
10	$\overline{\text{I-SHATTER}}$	I	Connected to GND.
11	$\overline{\text{I-TGDOWN}}$	I	
12	NC	—	Not used.
13	IC	—	Connected to GND.
14	X2	O	Output terminal for external ceramic oscillator.
15	X1	I	Input terminal for external ceramic oscillator.
16	VSS	—	GND of microprocessor.
17	VDD	—	Power supply of microprocessor.
18	$\overline{\text{RESET}}$	I	Microprocessor reset input.
19	P53	—	Not used.
20	P52	—	
21	P51	—	
22	$\overline{\text{I-1992BR}}$	I	
23	$\overline{\text{I-FB}}$	I	
24	$\overline{\text{I-TG}}$	I	
25	$\overline{\text{I-TB}}$	I	
26	I-COMMAND	I	Command input from main microprocessor.
27	O-STATUS	O	Data output to main microprocessor.
28	I-SCLK	I	O-status read-out clock from main microprocessor/Clock for I-command.
29	X-BUSY	I/O	Flag for confirmation of busy and ready with the main microprocessor.
30	P06	—	Not used.
31	$\overline{\text{100MS}}$	—	Connected to GND.
32	O-AMUTE	O	Low output during playback only.
33	O-PLAY	O	High output during playback only
34	O-PAUSE	O	High output during pause only.
35	O-SERCH	O	High output during search only.
36	O-STOP	O	High output during stop only.
37	NC	—	Not used.
38	VDD	—	Power supply of microprocessor.
39	VSS	—	GND of microprocessor.
40	P17	—	Not used.

Pin No.	Pin Name	I/O	Description
41	O-SW6	O	Not used.
42	O-SW5	O	
43	O-SW4	O	
44	O-SW3	O	

MODEL NO. 6ZG-1S3

ELECTRICAL MAIN PARTS LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

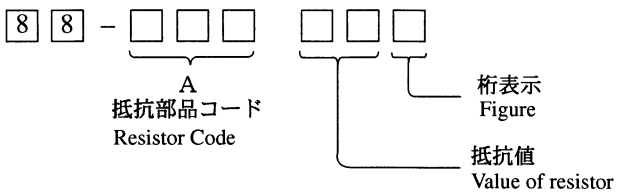
REF. NO	PART NO.	KANRI NO.	DESCRIPTION
IC			
	87-A20-547-010		C-IC,CXA1992AR
	87-A20-546-010		C-IC,CXD2589Q
	87-A20-592-040		C-IC,M51943 AML
	87-001-792-080		IC,NJM2100M
	87-070-305-010		IC,BA6897S
	87-A20-856-010		IC,BA6898S<D>
	87-001-982-010		IC,TA7291S
	86-ZG1-649-010		C-IC,UPD789026GB-510-MTX<D>
TRANSISTOR			
	89-406-555-080		TR,2SD655 (0.5W)<D>
	87-026-245-080		TR,DTC114ES<D>
	87-026-235-080		CHIP-TR,DTC114EK<D>
	87-026-463-080		TR,2SA933S (0.3W)
	89-324-123-080		C-TR,2SC2412K S
	87-026-227-080		CHIP-TR,DTA114EK
	89-421-722-380		TR,2SD2172V/W
	89-320-011-080		TR,2SC2001 (15W)
	87-026-239-080		TR,DTC114TK (0.2W)
	87-026-223-080		TR,DTC143TK<D>
	89-110-155-080		TR,2SA1015(0.4W)
	89-213-292-380		TR,2SB1329QR<D>
	87-026-608-080		C-TR,DTC 123 JK
	87-A30-075-080		C-TR,2SA1235F<D>
	89-327-125-080		CHIP TR,2SC2712GR<D>
DIODE			
	87-A40-348-080		ZENER,MTZJ3.3A<D>
	87-027-583-080		ZENER,HZ9B1L (200MA)<D>
	87-020-465-080		DIODE,1SS133 (110MA)
	87-A40-291-080		DIODE,1N4148 (CPT)<D>
CD MAIN C.B			
C1	87-010-196-080		CHIP CAPACITOR,0.1-25<D>
C2	87-010-260-080		CAP, ELECT 47-25V<D>
C3	87-010-221-040		CAP,E 470-10 SME<D>
C4	87-010-197-020		C-CAP,S 0.01-25 B<D>
C5	87-010-184-020		C-CAP,S 3300P-50 B<D>
C101	87-010-263-040		CAP,E 100-10
C101	87-010-550-040		CAP,E 100-6.3 GAS<D>
C102	87-010-178-020		C-CAP,S 1000P-50 B
C103	87-010-550-040		CAP,E 100-6.3 GAS
C104	87-010-182-020		C-CAP,S 2200P-50 B
C105	87-010-198-020		C-CAP,S 0.022-25 B
C106	87-016-081-080		C-CAP,S 0.1-16 RK
C107	87-016-081-080		C-CAP,S 0.1-16 RK
C108	87-016-081-080		C-CAP,S 0.1-16 RK
C109	87-010-497-040		CAP,E 4.7-35 GAS
C109	87-010-404-040		CAP,E 4.7-50 SME<D>
C110	87-016-081-080		C-CAP,S 0.1-16 RK
C111	87-010-197-020		C-CAP,S 0.01-25 B
C112	87-010-402-040		CAP,E 2.2-50 SME
C113	87-010-382-040		CAP,E 22-25 SME
C114	87-010-213-020		C-CAP,S 0.015-25 B
C115	87-010-263-040		CAP,E 100-10
C116	87-010-197-020		C-CAP,S 0.01-25 B
C117	87-016-369-020		C-CAP,S 0.033-25 B K<D>
C117	87-010-186-020		C-CAP,S 4700P-50 B
C118	87-010-197-020		C-CAP,S 0.01-25 B
C119	87-016-369-020		C-CAP,S 0.033-25 B K
C120	87-010-197-020		C-CAP,S 0.01-25 B
C121	87-010-494-040		CAP,E 1-50 GAS
C121	87-010-401-040		CAP,E 1-50 SME<D>
C122	87-010-154-020		C-CAP,S 10P-50 CH
C123	87-010-154-020		C-CAP,S 10P-50 CH
C124	87-010-154-020		C-CAP,S 10P-50 CH
C125	87-010-596-020		C-CAP,S 0.047-16 RK
C126	87-010-596-020		C-CAP,S 0.047-16 RK
C127	87-012-140-020		C-CAP,S 470P-50 CH
C128	87-010-596-020		C-CAP,S 0.047-16 RK
C129	87-010-198-020		C-CAP,S 0.022-25 B
C130	87-016-081-080		C-CAP,S 0.1-16 RK
C131	87-010-550-040		CAP,E 100-6.3 GAS
C132	87-010-550-040		CAP,E 100-6.3 GAS
C133	87-012-158-020		C-CAP,S 390P-50 J CH
C150	87-010-145-020		C-CAP,S 1P-50 C CH
C202	87-010-596-020		C-CAP,S 0.047-16 RK
C203	87-010-188-020		C-CAP,S 6800P-50 B
C204	87-012-156-020		C-CAP,S 220P-50 CH
C205	87-018-133-080		CAPACITOR,CER 4700P-16V
C205	87-018-134-080		CAPACITOR,TC-U 0.01-16<D>
C206	87-010-400-040		CAP,E 0.47-50
C207	87-010-197-020		C-CAP,S 0.01-25 B
C208	87-010-318-020		C-CAP,S 47P-50 CH<D>
C209	87-012-154-020		C-CAP,S 150P-50 J CH GRM
C210	87-012-154-020		C-CAP,S 150P-50 J CH GRM
C211	87-010-176-020		C-CAP,S 680P-50 J SL
C212	87-010-176-020		C-CAP,S 680P-50 J SL
C213	87-010-400-040		CAP,E 0.47-50<D>
C213	87-010-382-040		CAP,E 22-25 SME
C214	87-010-400-040		CAP,E 0.47-50<D>
C214	87-010-382-040		CAP,E 22-25 SME
C215	87-010-318-020		C-CAP,S 47P-50 CH
C216	87-010-318-020		C-CAP,S 47P-50 CH
C217	87-010-101-040		CAP,E 220-16 SME<D>
C217	87-010-380-040		CAP,E 47-16 SME
C218	87-010-197-020		C-CAP,S 0.01-25 B
C219	87-010-196-020		C-CAP,S 0.1-25 F
C220	87-010-370-040		CAP,E 330-6.3 SME
C221	87-010-197-080		CAP, CHIP 0.01 DM
C222	87-010-186-020		C-CAP,S 4700P-50 B
C223	87-016-081-020		C-CAP,S 0.1-16 RK
C224	87-010-805-080		CAP, S 1-16<D>
C228	87-018-134-080		CAPACITOR,TC-U 0.01-16<D>
C230	87-018-209-080		CAP, CER 0.1-50V
C231	87-018-209-080		CAP, CER 0.1-50V
C231	87-018-134-080		CAPACITOR,TC-U 0.01-16<D>
C301	87-010-101-080		CAP, ELECT 220-16
C302	87-010-263-080		CAP, ELECT 100-10V
C305	87-010-318-020		C-CAP,S 47P-50 CH
C306	87-010-318-020		C-CAP,S 47P-50 CH
C307	87-010-405-080		CAP, ELECT 10-50V
C308	87-010-405-080		CAP, ELECT 10-50V
C401	87-010-403-080		CAP, ELECT 3.3-50V
C402	87-010-403-040		CAP,E 3.3-50 SME
C501	87-010-555-040		CAP,E 100-10 GAS<D>
C501	87-016-459-040		CAP,E 470-10 SMG
C502	87-010-197-020		C-CAP,S 0.01-25 B
C503	87-010-263-040		CAP,E 100-10
C503	87-010-555-040		CAP,E 100-10 GAS<D>
C504	87-010-196-020		C-CAP,S 0.1-25 F
C505	87-010-196-020		C-CAP,S 0.1-25 F
C506	87-010-196-020		C-CAP,S 0.1-25 F
C507	87-010-196-020		C-CAP,S 0.1-25 F
C508	87-010-221-040		CAP,E 470-10 SME<D>
C508	87-016-459-040		CAP,E 470-10 SMG
C509	87-010-196-020		C-CAP,S 0.1-25 F
C510	87-010-196-020		C-CAP,S 0.1-25 F
C511	87-010-221-040		CAP,E 470-10 SME<D>
C512	87-010-197-020		C-CAP,S 0.01-25 B<D>
C601	87-010-197-020		C-CAP,S 0.01-25 B
C602	87-016-251-040		CAP,E 220-16 SMG
C602	87-010-385-010		CAP,E 220-25<D>
C603	87-010-196-020		C-CAP,S 0.1-25 F
C701	87-010-322-020		C-CAP,S 100P-50 CH
C702	87-010-318-020		C-CAP,S 47P-50 CH

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
C703	87-010-318-020		C-CAP,S 47P-50 CH
C705	87-010-178-020		C-CAP,S 1000P-50 B
C705	87-010-322-020		C-CAP,S 100P-50 CH<D>
C706	87-018-209-080		CAP, CER 0.1-50V
C801	87-010-263-040		CAP,E 100-10<D>
C802	87-010-197-020		C-CAP,S 0.01-25 B<D>
C803	87-010-318-020		C-CAP,S 47P-50 CH<D>
C804	87-010-318-020		C-CAP,S 47P-50 CH<D>
C807	87-010-318-020		C-CAP,S 47P-50 CH<D>
C808	87-010-318-020		C-CAP,S 47P-50 CH<D>
C809	87-010-318-020		C-CAP,S 47P-50 CH<D>
C810	87-010-318-020		C-CAP,S 47P-50 CH<D>
C901	87-010-260-080		CAP, ELECT 47-25V<D>
C901	87-010-260-040		CAP,E 47-25 SME<D>
C902	87-010-196-020		C-CAP,S 0.1-25 F<D>
C902	87-010-196-080		CHIP CAPACITOR,0.1-25<D>
CN2	86-ZG1-609-010		CONN ASSY,6P
CON1	87-A60-424-010		CONN,16P V TOC-B
CON2	87-009-034-010		CONN,6P PH V
CON3	87-A60-133-010		CONN,8P V FE
CON5	87-A60-154-010		CONN,6P H FE
CON6	87-099-033-010		16P 6216 H
CON6	87-A60-160-010		CONN,12P H FE<D>
CON301	87-009-346-010		CONN,3P PH H
CON302	87-009-350-010		CONN,7P PH H
FB9	87-A50-192-080		C-COIL,S BLM21P300S<D>
FB50	87-A50-192-080		C-COIL,S BLM21P300S<D>
FB75	87-008-372-080		FILTER, EMI BL OIRNI<D>
FB84	87-008-372-080		FILTER, EMI BL OIRNI<D>
FB90	87-003-223-010		FERRITE BEAD BLO2RN2<D>
FB94	87-003-223-010		FERRITE BEAD BLO2RN2<D>
FB101	83-XM1-617-080		C-COIL,BK2125HM601<D>
FB301	87-008-372-080		FILTER, EMI BL OIRNI
FB401	87-008-372-080		FILTER, EMI BL OIRNI
FC1	86-ZG1-605-010		CABLE,FFC 16P
FC2	86-ZG1-667-010		F-CABLE,8P 1.25 175MM BLACK
L31	87-003-102-080		COIL, 10UH<D>
L101	87-003-102-080		COIL, 10UH
L201	87-003-102-080		COIL, 10UH
LED901	87-A40-123-010		LED,SLZ-8128A-01-B<D>
M601	87-045-305-010		MOTOR, RF-500TB DC-5V (2MA)
R101	87-022-363-020		C-RES,S 68K-1/10W F
R102	87-022-363-020		C-RES,S 68K-1/10W F
R103	87-022-363-020		C-RES,S 68K-1/10W F
R104	87-022-363-020		C-RES,S 68K-1/10W F
R105	87-022-365-020		C-RES,S 100K-1/10W F
R106	87-022-365-020		C-RES,S 100K-1/10W F
R301	87-025-337-080		RESISTOR, 1/4W 47
R420	87-029-060-080		RES,FUSE 33-1/4 W<D>
S601	87-036-109-010		PUSH SWITCH
S602	87-036-109-010		PUSH SWITCH
S603	87-036-109-010		PUSH SWITCH
X201	87-A70-046-010		VIB,XTAL 16.934MHZ
X801	87-A70-075-080		VIB,CER 4.19MHZ CRHF<D>
LED C.B			
LED701	87-017-733-080		LED,SEL1250SM
LED702	87-017-350-080		LED,SEL1550CM
LED703	87-017-733-080		LED,SEL1250SM
T-T C.B			
C411	87-018-214-080		CAP TC U 0.1-50F
CON8	87-A60-156-010		CONN,8P H FE
LED411	87-070-288-010		LED,GL380
M401	87-A90-036-010		MOT ASSY,RF-300CA-11
PS401	87-A90-156-010		SNSR,SG-240
Q411	87-A30-031-010		P-TR,PT380F
S401	87-036-109-010		PUSH SWITCH

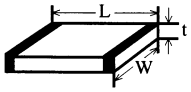
- Regarding connectors, they are not stocked as they are not the initial order items.
  The connectors are available after they are supplied from connector manufacturers upon the order is received.

○ チップ抵抗部品コード / CHIP RESISTOR PART CODE

チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding

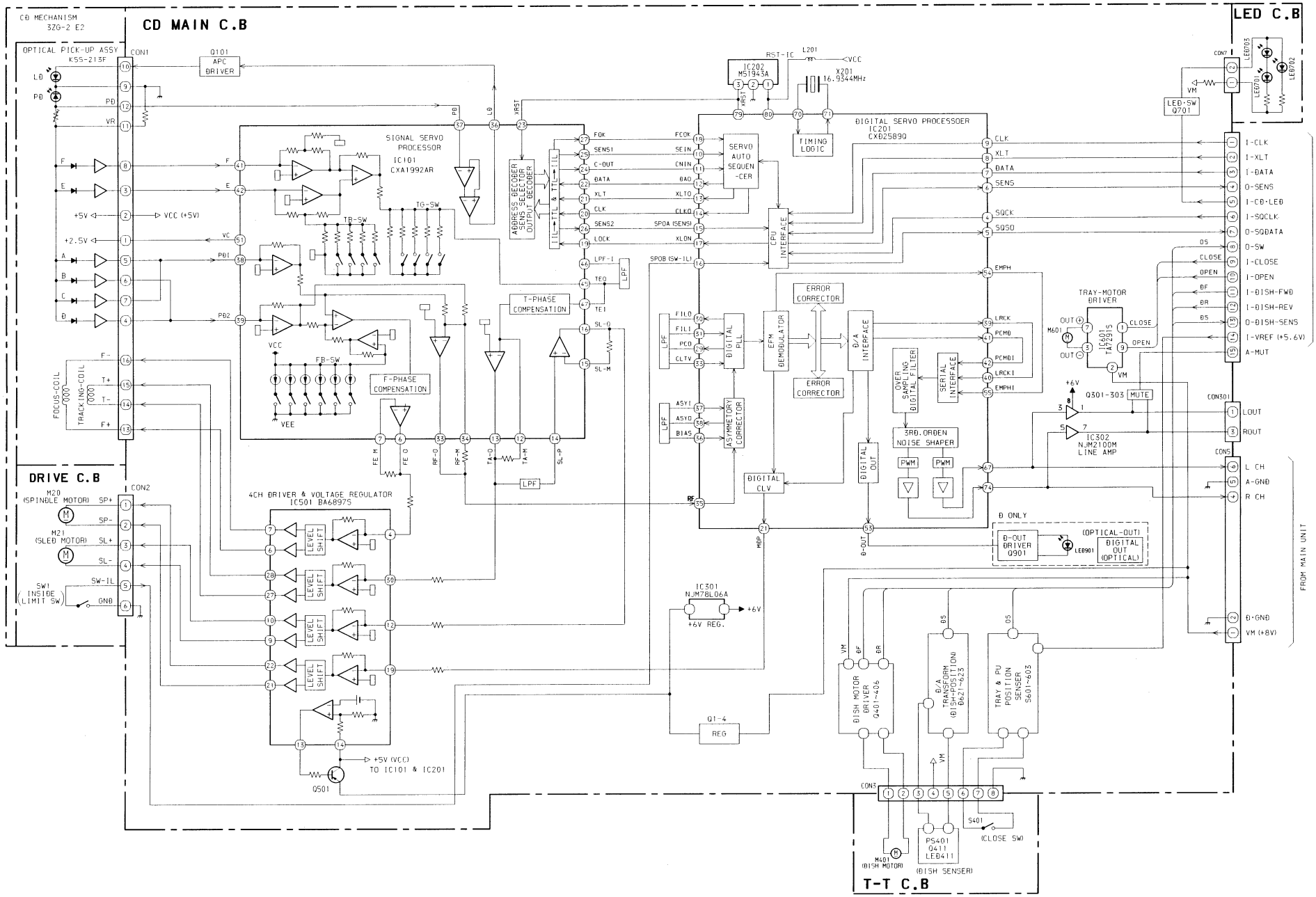


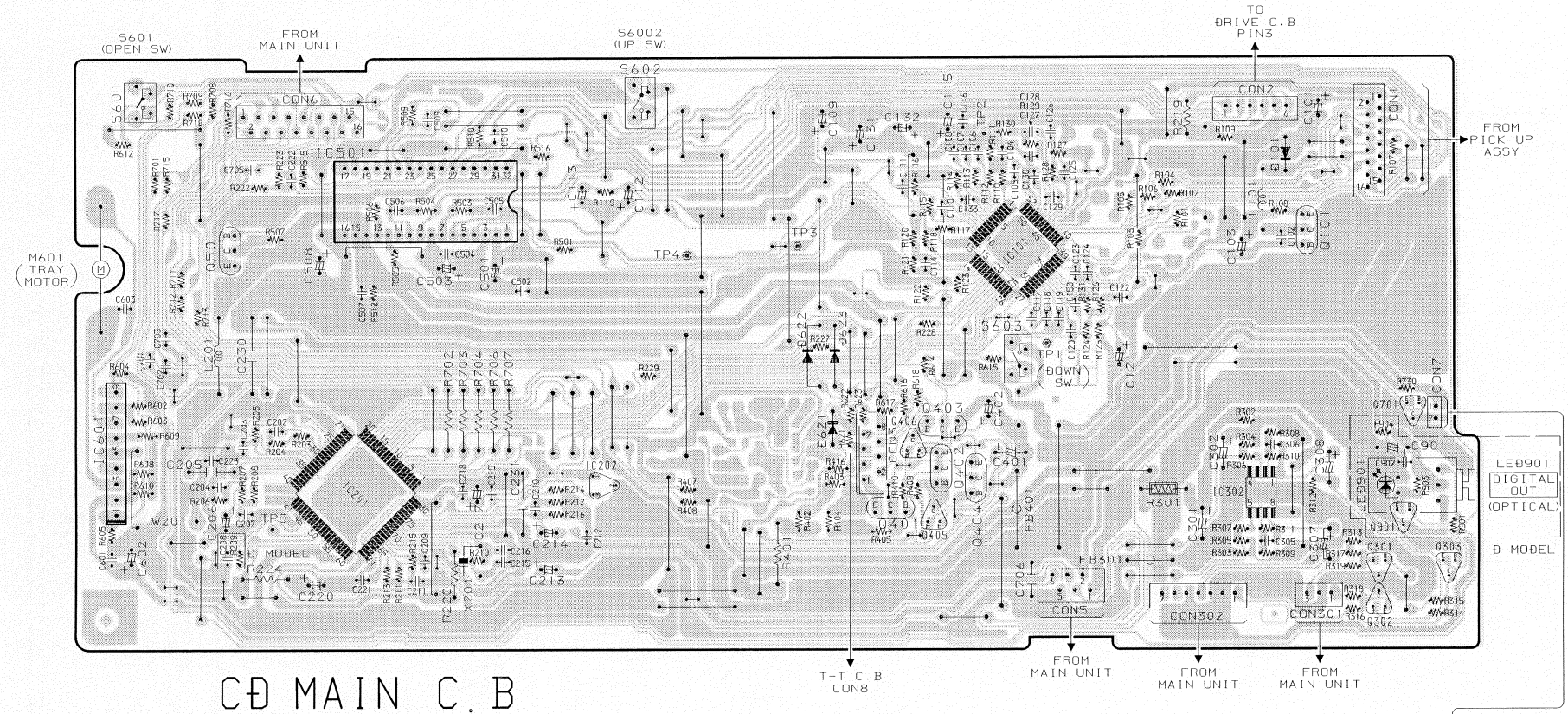
チップ抵抗
Chip resistor

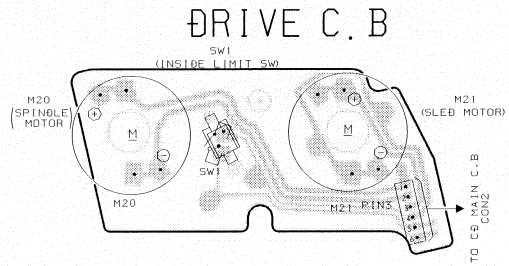
容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法 / Diamensions (mm) 外形 / Form	L	W	t	抵抗コード :A Resistor Code : A
1/16W	1608	5%	CJ		1.6	0.8	0.45	108
1/10W	2125	5%	CJ		2	1.25	0.45	118
1/8W	3216	5%	CJ		3.2	1.6	0.55	128

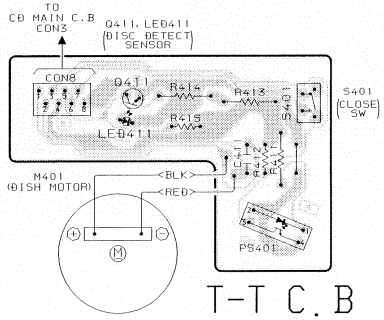
Refer to the following pages for the common section.

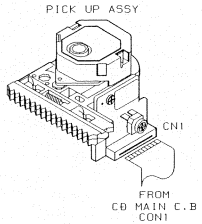
- IC DESCRIPTION ..... See page 17
- IC BLOCK DIAGRAM ..... See page 21
- MECHANICAL EXPLODED VIEW ..... See page 23
- MECHANICAL PARTS LIST ..... See page 24
- CD MECHANISM EXPLODED VIEW ..... See page 25
- CD MECHANISM PARTS LIST ..... See page 25

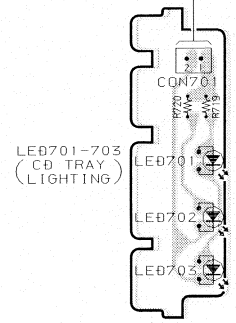

CD MECHANISM
3ZG-2 E2
CD MAIN C.B
LED C.B
DRIVE C.B
T-T C.B
OPTICAL PICK-UP ASSY
KSS-213F
SIGNAL SERVO PROCESSOR
IC101
CXA1992AR
DIGITAL SERVO PROCESSOER
IC201
CXD2589Q
TIMING LOGIC
SERVO AUTO SEQUEN -CER
CPU INTERFACE
ERROR CORRECTOR
DIGITAL PLL
EFM DEMODULATOR
D/A INTERFACE
OVER SAMPLING DIGITAL FILTER
SERIAL INTERFACE
3RD. ORDER NOISE SHAPER
PWM
DIGITAL OUT
DIGITAL CLV
ASYMMETORY CORRECTOR
T-PHASE COMPENSATION
F-PHASE COMPENSATION
4CH DRIVER & VOLTAGE REGULATOR
IC501 BA6897S
LEVEL SHIFT
IC301
NJM78L06A
+6V REG.
Q1-4
REG
Q501
+5V (VCC)
TO IC101 & IC201
APC DRIVER
Q101
RST-IC
IC202
M51943A
X201
16.9344MHz
LED-SW
Q701
TRAY-MOTOR DRIVER
IC201
TA2041S
Q301-303
MUTE
IC302
NJM2100M
LINE AMP
Θ ONLY
Θ-OUT DRIVER
Q901
(OPTICAL-OUT)
DIGITAL OUT (OPTICAL)
DISH MOTOR DRIVER
Q401~406
D/A TRANSFORM (DISH-POSITION)
Q621~623
TRAY & PU POSITION SENSER
S601~603
PS401
Q411
LED411
(DISH SENSER)
S401
(CLOSE SW)
M401
(DISH MOTOR)
M20
(SPINDLE MOTOR)
M21
(SLED MOTOR)
SW1
(INSIDE LIMIT SW)
FOCUS-COIL
TRACKING-COIL
FROM MAIN UNIT
FROM MAIN UNIT

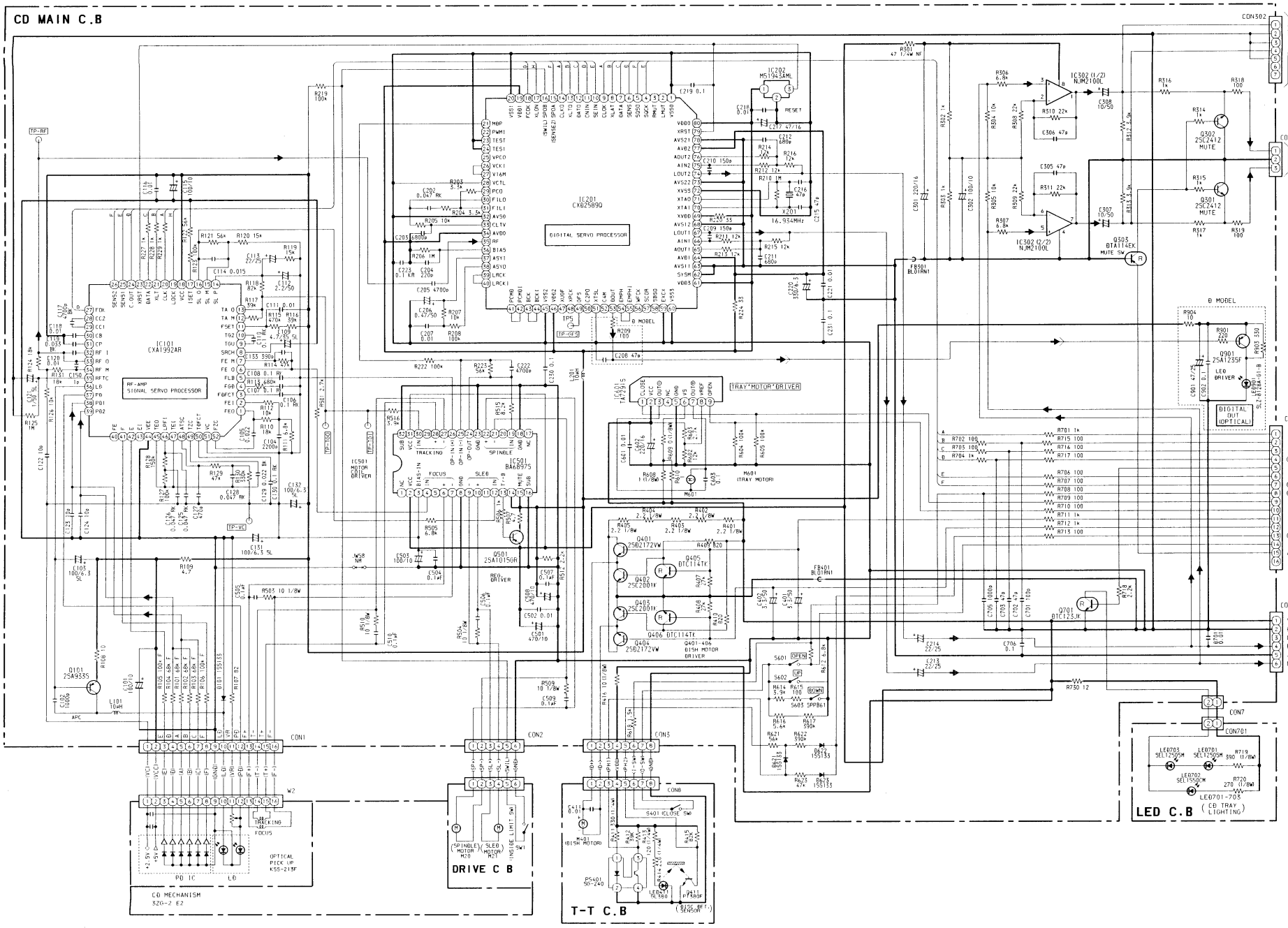

S601
(OPEN SW)
FROM
MAIN UNIT
S6002
(UP SW)
TO
ĐRIVE C.B
PIN3
FROM
PICK UP
ASSY
M601
(TRAY
MOTOR)
IC501
IC601
IC201
IC202
IC401
S603
TP1
(DOWN
SW)
TP3
TP4
TP5
W201
X201
Q501
Q403
Q402
Q404
Q401
Q405
D MODEL
LEĐ901
ĐIGITAL
OUT
(OPTICAL)
T-T C.B
CON8
FROM
MAIN UNIT
FROM
MAIN UNIT
FROM
MAIN UNIT
CON2
CON3
CON4
CON5
CON6
CON7
CON302
CON301
FB301
FB401
R301
CĐ MAIN C.B


ĐRIVE C.B
SW1
(INSIDE LIMIT SW)
M20
(SPINĐLE)
MOTOR
M21
(SLEĐ MOTOR)
M20
SW1
M21 PIN3
TO CĐ MAIN C.B
CON2


TO
CĐ MAIN C.B
CON3
Q411, LEĐ411
(ĐISC ĐETECT
SENSOR)
CON8
Q411
R414
R413
R415
LEĐ411
S401
(CLOSE
SW)
M401
(ĐISH MOTOR)
<BLK>
<REĐ>
PS401
T-T C.B


PICK UP ASSY
CN1
FROM
CĐ MAIN C.B
CON1


CON701
LEĐ701-703
(CĐ TRAY
LIGHTING)
LEĐ701
LEĐ702
LEĐ703
LEĐ C.B


CD MAIN C.B
IC101 CXA1992AR
RF-AMP SIGNAL SERVO PROCESSOR
IC201 CX02589Q
DIGITAL SERVO PROCESSOR
IC202 MS1945AML
IC302 (1/2) NJM2100L
IC302 (2/2) NJM2100L
Q305 DTA114EK MUTE SW
Q302 2SC2412 MUTE
Q301 2SC2412 MUTE
Q901 2SA1235F LED DRIVER
IC601 TA7291S TRAY MOTOR DRIVER
IC501 MOTOR DRIVER
IC501 BA6897S
Q501 2SA1015GR REG. DRIVER
Q401 2SD2172VW
Q402 2SC2001K
Q403 2SC2001K
Q404 2SD2172VW
Q405 DTC114TK
Q406 DTC114TK
Q401-406 61SH MOTOR DRIVER
Q701 DTC123JK
Q101 2SA933S APC
TRAY MOTOR DRIVER
B MODEL
DIGITAL OUT (OPTICAL)
TO/FROM MAIN UNIT
CON1
CON2
CON3
CON5
CON6
CON7
CON8
CON301
CON302
CON701
W2
DRIVE C B
T-T C.B
LED C.B (CD TRAY LIGHTING)
CD MECHANISM SZG-2 E2
OPTICAL PICK UP KSS-213F
PD IC
LD
TRACKING
FOCUS
(SPINDLE) MOTOR M20
SLED MOTOR M21
61SH MOTOR
S401 (CLOSE SW)
S601 OPEN
S602 UP
S603 DOWN
S603 SPPB61
PS401 SG-240
SENSOR
I-CLK
I-XTL
I-DATA
O-SENS
I-CD.LED
I-SQCLK
O-SGDATA
O-SW
I-CLOSE
I-OPEN
I-DISH.FWD
I-DISH.REV
O-DISH.SENS
I-VREF
A-MUTE
VM (+12V)
B-GND
CD ON
R CH
A-GND
L CH

CD TEST MODE

< How to Enter the Test Mode >

While pressing the SLEEP&OPEN/CLOSE key, insert the AC power cord to AC wall outlet.

< When the Machine Has Entered the Test Mode >

The system is initialized and the main power is turned on. During the test mode, the main power of the CD block is turned on always. The test mode starts with the [Sled mode].

< Types of Test Mode >

[Sled mode]

All displays of the FL tubes light. The optical pickup can be moved by pressing [⟪] or [⟫]key.

Pressing the [▷] key establishes the [Play mode].

Pressing the [⟪] key moves the sled to outer circumference.
Pressing the [⟫] key moves the sled to inner circumference.
Pressing OPEN/CLOSE key opens or closes the tray.

[Play mode]

Lighting of all displays of the FL tubes are turned off and returns to normal display. The focus search (numbers of search is unlimited) is performed. When focus comes to in-focus, the focus servo is locked in and the machines enters the normal play mode.
During [Play mode], GFS and sound skipping are not monitored.
When focus becomes out-of-focus, another attempt is made to search for focus.
The tracking servo and the sled servo can be turned on and off by pressing the [▷] key.

Pressing the [□] key establishes the [Sled mode].
The [II] display can be turned on and off by pressing the [▷] key .

While the [II] display is turned off:
CLV-A Tracking servo: on
Sled servo: on
While the [II] display is turned on:
CLV-A Tracking servo: off
Sled servo: off

Pressing the [⟪] key decreases the track number to -1.
Pressing the [⟫] key increases the track number to +1.
Pressing OPEN/CLOSE key opens or closes the tray.
The machine enters the [Sled mode].

< How to Exit the Test Mode >

Remove the AC power cord from power outlet, or turn off the system power.

USE MODEL LIST

XC-30M
DX-Z9450
CX-NMT960
CX-ZR880
CX-ZR990
CX-ZR770
CX-ZR774
CX-NF959
CX-NF958
CX-ZR550
CX-NA959
CX-ZVR99
CX-ZVR80
CX-ZVR88
CX-NAVF960
CX-NMT960
CX-ZR700

サービス技術ニュース	
番号	連絡内容
G一　一	
G一　一	
G一　一	

アイワ株式会社
AIWA CO.,LTD.

912162

Tokyo Japan

〒110　東京都台東区池之端1-2-11　☎03（3827）3111（代表）

VIDE-V21772